Asbestos and Lead-Based Paint Survey Report

1690 Turnbull Avenue
Old Hosptial
North Charleston, South Carolina
February 20, 2019
Terracon Project No. EN197470

Prepared for:
Palmetto Railways
Charleston, South Carolina

Prepared by:
Terracon Consultants, Inc.
North Charleston, South Carolina

Inspected by:
Andrew Mitroka (SC-ASB-01871)
Craig C. Langford (SC ASB-22775)

February 20, 2020

Palmetto Railways
540 East Bay Street
Charleston, South Carolina 29403

Attn: Alec Thompson
Phone: (843) 737-8440
Email: athompson@palmettorail.com

Re: Asbestos and Lead-Based Paint Survey Report
Old Hospital
North Charleston, South Carolina
Terracon Project No. EN197470

Dear Mr. Thompson:

Terracon Consultants, Inc. (Terracon) is pleased to present the results of the asbestos and lead-based paint survey performed January 23 and 24, and February 18, 2020, of the building located at 1690 Turnbull Avenue, North Charleston, South Carolina. We understand that this survey was requested due to the planned renovation of the building.

Terracon appreciates the opportunity to provide environmental consulting services. If you should have any questions regarding this report, or if you need assistance with bid documents or project oversight during the building renovation, please contact the undersigned at (843) 277-8402.

Sincerely,
Terracon Consultants, Inc.

Andrew Mitroka
Field Scientist

Craig C. Langford, OHST
Senior Industrial Hygienist

for
Jeffrey A. Gurrie, CIH
Authorized Project Reviewer

TABLE OF CONTENTS

LIST OF APPENDICES

EXECUTIVE SUMMARY

This executive summary is intended as an overview for the convenience of the reader. The report should be reviewed in its entirety prior to making any decisions regarding this site.

Terracon Consultants, Inc. (Terracon) conducted an asbestos and lead-based paint survey for the renovation of a 250,000 ft^2 building located at 1690 Turnbull Avenue in North Charleston, South Carolina. It was our understanding that Palmetto Rail plans to renovate the building. The purpose of this survey was to sample and identify suspect asbestos-containing materials (ACM) and provide information regarding the identity, location, condition and approximate quantities of ACM in interior and exterior building components.

The survey was performed on January 23 and 24, and February 18, 2020, by a South Carolina Department of Health and Environmental Control (SCDHEC) licensed asbestos inspector in general accordance with our proposal dated December 18, 2019 and the sampling protocols established in EPA 40 CFR 763 (Asbestos Hazard Emergency Response Act, AHERA) and the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects.

Two-hundred and forty-three (243) bulk samples were collected from sixty-four (64) homogeneous areas of suspect ACM. Based on the results of laboratory analysis, the following suspect materials were identified as asbestos-containing materials (ACMs) defined as containing >1% asbestos:

- Friable joint compound (Chrysotile, 2%) associated with the wallboard system located on the first and second floor; approximately 150,000 ft^2
- Non-friable sheet flooring (Chrysotile, 12-15%) associated with the hallway surrounding the courtyard on the second floor; approximately 21,000 ft^2
- Non-friable 12”x12” gray floor tile (Chrysotile, 8%-10%) located in the 3rd wing on the second floor; approximately 2,500 ft^2
- Non-friable 12”x12” tan floor tile (Chrysotile, 2%-4%) and associated black mastic (Chrysotile, 6% Chrysotile) located on the first floor (basement); approximately 7,500 ft^2
- Non-friable 9”x9” green floor tile (Chrysotile, 3%-4%) associated with the flooring on the first floor (basement); approximately 7,500 ft^2
- Friable pipe insulation (Amosite, 2%-8%; Chrysotile, 30%-35%) associated with the piping of the first floor (basement); approximately 1,200 linear feet
- Friable pipe debris (Amosite, 20%; Chrysotile, 10%) associated with the entire first floor (basement); approximately 30,000 ft^2
- Friable pipe elbow (Amosite, 2%) associated with exterior boiler room 1; 1 Elbow
- Friable door gasket (Chrysotile, 60%) associated with exterior boiler room 1 boiler door; approximately 20 linear feet.

- Pipe Insulation (10% Amosite; 4% Chrysotile) associated with the debris located on the second floor building entrance; approximately 2,500 ft^2
- Floor tile and mastics (4-6% Chrysotile) associated with beige floor tile and black bottom layer mastic located in the 2nd wing on the second floor; approximately 2,500 ft^2
- Floor tile (8% Chrysotile) associated with the beige floor tile located in the 1st wing on the second floor; approximately 2,500 ft^2
- Floor Tile (8% Chrysotile) associated with the beige floor tile located in the 8th wing on the second floor; approximately 2,500 ft^2
- Sheet Flooring (15% Chrysotile) associated with the red/orange sheet flooring located in the 9th wing on the second floor; approximately 2,500 ft^2
- Transite Siding (15% Chrysotile) associated with the siding of the connecting bridges between 2nd, 3rd, and 4th wings on the second floor; approximately 3,000 ft^2
- Black floor tile mastic (3% Chrysotile) associated with the red floor tile located in the 7th wing entrance on the second floor; approximately 1,500 ft^2
- Floor tile (8% chrysotile) associated with the beige floor tile located on west end of the 7th wing on the second floor; approximately 1,500 ft^2

The following materials contained <1% asbestos

- Friable sheet flooring mastic (0.58% Chrysotile) associated with the sheet flooring in the hallway surrounding the courtyard; approximately 21,000 ft^2
- Green floor tile mastic (0.56% Chrysotile) associated with 12’ floor tile located in the 1st wing on the second floor; approximately 2,500 ft^2
- Black floor tile mastic (0.68% Chrysotile) associated with 12’ floor tile located in the 1st wing on the second floor; approximately 1,500 ft^2
- Orange carpet mastic (0.58% Chrysotile) associated with the carpet located in the 3rd wing on the second floor; approximately 5,000 ft^2
- Tan and black floor tile mastic (0.69% Chrysotile, <1% Chrysotile) associated with 12’ gray floor tile located in the 3rd wing on the second floor; approximately 2,500 ft^2
- Floor tile mastic (0.27% Chrysotile) associated with 9’ green floor tile located on the first floor; approximately 1,200 ft^2
- Brown carpet mastic (0.61% Chrysotile) associated with the carpet located in the 4th wing on the second floor; approximately 2,500 ft^2
- Floor Tile Mastic (.50% Chrysotile) associated with the black and white floor tile located in the 4th wing on the second floor; approximately 2,500 ft^2

- Floor Tile Mastic (.59% Chrysotile) associated with the beige floor tile located in the 8th wing on the second floor; approximately 2,500 ft^2
- Sheet flooring mastic (.79% Chrysotile) associated with the red/orange sheet flooring located in the 9th wing on the second floor; approximately 2,500 ft^2
- Floor mastic (.44% Chrysotile) associated with the gray floor tile in the 7th wing on the second floor; approximately 1,500 ft^2

Twelve (12) paint-chip samples were collected from the components of the structure on the site. Three (3) sample results were above the EPA definition of lead paint of 0.5%. Eleven (11) samples were above the SCDHEC 0.06% by weight threshold for disposal. All paints should be considered lead-containing.

ASBESTOS AND LEAD-BASED PAINT SURVEY REPORT
OLD HOSPITAL
1690 TURNBULL AVENUE
NORTH CHARLESTON, SOUTH CAROLINA
PROJECT NO. EN197470
INSPECTION DATE: January 23 and 24, 2020
REPORT DATE: February 20, 2020

1.0 INTRODUCTION

Terracon Consultants, Inc. (Terracon) conducted an asbestos and lead-based paint survey of building materials of the building located at 1690 Turnbull Avenue, North Charleston, South Carolina. The survey was conducted on January 23 and 24, and February 18, 2020, by a South Carolina Department of Health and Environmental Control (SCDHEC) licensed building inspector in general accordance with our Proposal No PEN197470Rev1 dated December 18, 2019. The purpose of this survey was to sample and identify suspect asbestos-containing materials (ACM) and provide information regarding the identity, location, condition and approximate quantities of ACM in interior and exterior building components.

Terracon understands that the building will be renovated. Environmental Protection Agency (EPA) regulation 40 CFR 61, Subpart M, National Emission Standards for Hazardous Air Pollutants (NESHAP), prohibits the release of asbestos fibers to the atmosphere during renovation/demolition activities. NESHAP and SCDHEC requires that potentially regulated asbestos-containing building materials be identified, classified and quantified prior to planned disturbances or demolition activities.

Suspect ACM was sampled in general accordance with the sampling protocols outlined in EPA Regulation 40 CFR 763 Subpart E763.86 (Asbestos Hazard Emergency Response Act, AHERA) and SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects. Interior building components were surveyed and homogeneous areas of suspect asbestos-containing materials (ACM) were visually identified and documented. Although reasonable effort was made to survey accessible suspect materials, additional suspect but un-sampled materials could be located in walls, in voids or in other concealed areas. Samples were delivered to an accredited laboratory for analysis by Polarized Light Microscopy (PLM) and Transmission Electron Microscopy (TEM), as required.

Paint sampling on representative paints was performed to determine lead content. Knowledge of lead content in paint assists with waste determination and potential employee exposure if disturbed. Lead is regulated by the EPA, SCDHEC and OSHA. The EPA and SCDHEC regulate lead use, removal, and disposal, and OSHA regulates lead exposure to workers. The EPA defines LBP as paint, varnish, stain, or other applied coating that contains lead equal to or greater than 1.0 mg/cm^2, 5,000 mg/kg, or 0.5% by dry weight as determined by laboratory analysis. The SCDHEC

regulations 61-107.19 require that painted demolition debris with a lead concentration greater than 0.06% by weight be disposed in a permitted Class II landfill. For the purpose of the OSHA lead standard, lead includes metallic lead, all inorganic lead compounds, and organic lead soaps. The complete OSHA standard for compliance can be found on OSHA's website (www.osha.gov). A synopsis of the OSHA regulations (29 CFR 1926.62) and the applicability are as follows:

2.0 BUILDING DESCRIPTION

The building is an approximately 250,000 ft^2 structure. The site consists of a three-story former hospital building. The structure is in dilapidated condition, particularly the west portions of the 1st and 2nd floor, and the south entrance of the 2nd floor. Interior finishes consist of plaster wall and ceilings, wallboard system, wall paneling, lay-in ceiling tiles panels, carpeting (floor tile under carpet), floor tile/mastic, and sheet flooring. The building was formerly heated and cooled by a boiler system. Two boiler rooms are located on the north exterior side of the building.

The building consists of eight wings branching off a main hallway that surrounds a courtyard. The wings consisted of various rooms and hospital uses, mostly offices and conferences rooms. 1st floor wings along the west side of the building were too damaged to access or sample. The north portion of the 1st floor consists of a mechanical room, storage area, and interior boiler room. The north portion of the 2nd floor consist of a main room, and other offices. The 3rd floor is located on the south side of the building.

The roof consists of wood pitched frame with rolled felt and terracotta shingles. Two connecting hallway bridges were located between the 2nd, 3rd, and 4th wings on the second floor. These structures consisted of transite siding over rolled felt, with a metal pitched roof. The interior of these structures were inaccessible.

Non-suspect ACMs include fiberglass insulation, fiberglass pipe insulation, foam glass pipe insulation, rubber/silicon caulking.

Suspect identified ACMs sampled were:

- Wallboard systems (drywall and joint compound)
- Plaster Rough Coat
- Plaster Skim Coat
- Carpet mastic
- Ceiling Tiles
- Floor Tile/Mastic
- Roofing Felt
- Baseboard Mastic
- Window Caulking and Glazing
- 1st Floor Debris
- Door Gasket
- Fire Door
- Acoustic Tiles and Mastic
- Sheet Flooring
- Pipe Insulation and Wrapping
- Transite Siding and Felt

3.0 ASBESTOS SURVEY

The asbestos survey was conducted by SCDHEC licensed Asbestos Building Inspector(s) Mr. Craig C. Langford (License No. ASB-22775 Exp. 07/09/20) and Mr. Andrew Mitroka (License No. ASB-01871 Exp. 07/16/20). A copy of Mr. Langford's and Mr. Mitroka's license is included in Appendix D. The survey was conducted on January 24, 2020, in general accordance with the sampling protocols established by EPA Regulation 40 CFR 763 Subpart E 763.86, AHERA and SCDHEC R. 61-86.1. A summary of survey activities is provided below.

3.1 Regulatory Overview

An ACM is defined as any material containing asbestos of any type in an amount greater than one percent (1%). The asbestos NESHAP (40 CFR Part 61, Subpart M) regulates asbestos fiber emissions and asbestos waste disposal practices. It also requires the identification and classification of existing building materials prior to demolition or renovation activity. Under NESHAP, asbestos-containing building materials are classified as either friable, Category I non-friable or Category II non-friable ACM. Friable materials are those that, when dry, may be crumbled, pulverized or reduced to powder by hand pressure. Category I non-friable ACM includes packing materials, gaskets, resilient floor coverings and asphalt roofing products containing more than 1 percent (%) asbestos. Category II non-friable ACM are non-friable materials other than Category I materials that contain more than 1% asbestos.

Friable ACM, Category I and Category II non-friable ACM which is in poor condition and has become friable or which will be subjected to drilling, sanding, grinding, cutting or abrading and which could be crushed or pulverized during anticipated renovation/demolition activities are considered regulated ACM (RACM). RACM must be removed prior to renovation or demolition activities.

In the state of South Carolina, asbestos activities are regulated by the SCDHEC under the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects. The SCDHEC require that any asbestos-related activity conducted in a public building be performed by personnel licensed by the SCDHEC. The owner or operator must provide the SCDHEC with written notification of planned abatement and removal activities prior to the commencement of those activities. The SCDHEC requires 4 day notification for non-friable projects and 10 day notification for RACM projects.

Asbestos abatement must be performed by SCDHEC-licensed asbestos abatement contractors. A SCDHEC-licensed Project Designer shall prepare a written abatement design for each abatement renovation project involving the removal of greater than 3,000 square, 1,500 linear, or 656 cubic feet of RACM. Third-party air monitoring must be conducted during the abatement of friable (regulated) ACM. The SCDHEC asbestos regulations can be found at http://www.scdhec.gov.

The Occupational Safety and Health Administration (OSHA) Asbestos Standard for Construction Industry (29 CFR 1926.1101) regulates workplace exposure to asbestos. The OSHA standard

requires that employee exposure to airborne asbestos fibers be maintained below 0.1 asbestos fibers per cubic centimeter of air (0.1 f/cc) for an eight-hour time weighted average. The OSHA standard classifies construction and maintenance activities, which could disturb ACM, and specifies work practices and precautions which employers must follow when engaging in each class of regulated work. A full copy of the OSHA asbestos standard for general industry may be found at OSHA's website (www.osha.gov) and should be referenced for specific information.

3.2 Visual Assessment

Our survey activities began with visual observation of the exterior and interior of the building to identify apparent homogeneous areas of suspect ACM. A homogeneous area consists of building materials, which appear similar throughout in terms of color, texture and date of application. Building materials which were not identified as concrete, glass, wood, masonry, metal or rubber were considered suspect ACM.

Terracon lifted floor coverings in several areas, where possible, and did not observe additional flooring layers unless mentioned in this report; however, as Terracon could not assess beneath all floor covering in all areas, there may be isolated areas of additional suspect material present beneath existing flooring.

3.3 Physical Assessment

A physical assessment of each homogeneous area of suspect ACM was conducted to assess the friability and condition of the materials. A friable material is defined by the EPA as a material, which can be crumbled, pulverized or reduced to powder by hand pressure when dry. Friability was assessed by physically touching suspect materials.

3.4 Sample Collection

Based on our observations, bulk samples of suspect ACMs were collected in general accordance with SCDHEC and EPA sample collection protocols. Random samples of suspect materials were collected in each homogeneous area. Bulk samples were collected using wet methods as applicable to reduce the potential for fiber release. Samples were placed in sealable containers and labeled with unique sample numbers using an indelible marker.

The selection of sample locations and frequency of sampling was based on Terracon's observations and the assumption that like materials in the same area are homogeneous in content. A summary of the suspect ACM samples collected during the survey is presented in Table 1 in Appendix A. Sample locations are depicted on Exhibits A1, A2, & A-3 in Appendix B.

3.5 Sample Analysis

Bulk samples were submitted under chain of custody to EMSL Analytical Laboratories in Pineville, North Carolina for analysis by Polarized Light Microscopy (PLM) with dispersion staining techniques per EPA EPA/600/R-93/116. The percentage of asbestos, where applicable, was determined by microscopical visual estimation. EMSL is accredited under the National Voluntary Laboratory Accreditation Program NVLAP.

Per the SCDHEC Regulation 61-86.1 Standards of Performance for Asbestos Projects, negative results for non-friable organically bound (NOB) materials such as flooring and roofing shall be verified with at least one TEM analysis. The additional analysis was performed by TEM in accordance with EPA/600/R-93/116 Section 2.5.5.1.

3.6 Findings and Recommendations

Two-hundred and forty-three (243) bulk samples were collected from sixty-four (64) homogeneous areas of suspect ACM. Based on the results of laboratory analysis, the following suspect materials were identified as asbestos-containing materials (ACMs) defined as containing >1% asbestos:

- Friable joint compound (Chrysotile, 2%) associated with the wallboard system located on the first and second floor; approximately 150,000 ft^2
- Non-friable sheet flooring (Chrysotile, 12-15%) associated with the hallway surrounding the courtyard on the second floor; approximately 21,000 ft^2
- Non-friable 12”x12” gray floor tile (Chrysotile, 8%-10%) located in the 3rd wing on the second floor; approximately 2,500 ft^2
- Non-friable 12”x12” tan floor tile (Chrysotile, 2%-4%) and associated black mastic (Chrysotile, 6% Chrysotile) located on the first floor (basement); approximately 7,500 ft^2
- Non-friable 9”x9” green floor tile (Chrysotile, 3%-4%) associated with the flooring on the first floor (basement); approximately 7,500 ft^2
- Friable pipe insulation (Amosite, 2%-8%; Chrysotile, 30%-35%) associated with the piping of the first floor (basement); approximately 1,200 linear feet
- Friable pipe debris (Amosite, 20%; Chrysotile, 10%) associated with the entire first floor (basement); approximately 30,000 ft^2
- Friable pipe elbow (Amosite, 2%) associated with exterior boiler room 1; 1 Elbow
- Friable door gasket (Chrysotile, 60%) associated with exterior boiler room 1 boiler door; approximately 20 linear feet.
- Pipe Insulation (10% Amosite; 4% Chrysotile) associated with the debris located on the second floor building entrance; approximately 2,500 ft^2
- Floor tile and mastics (4-6% Chrysotile) associated with beige floor tile and black bottom layer mastic located in the 2nd wing on the second floor; approximately 2,500 ft^2

- Floor tile (8% Chrysotile) associated with the beige floor tile located in the 1st wing on the second floor; approximately 2,500 ft^2
- Floor Tile (8% Chrysotile) associated with the beige floor tile located in the 8th wing on the second floor; approximately 2,500 ft^2
- Sheet Flooring (15% Chrysotile) associated with the red/orange sheet flooring located in the 9th wing on the second floor; approximately 2,500 ft^2
- Transite Siding (15% Chrysotile) associated with the siding of the connecting bridges between 2nd, 3rd, and 4th wings on the second floor; approximately 3,000 ft^2
- Black floor tile mastic (3% Chrysotile) associated with the red floor tile located in the 7th wing entrance on the second floor; approximately 1,500 ft^2
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The following materials contained <1% asbestos

- Friable sheet flooring mastic (0.58% Chrysotile) associated with the sheet flooring in the hallway surrounding the courtyard; approximately 21,000 ft^2
- Green floor tile mastic (0.56% Chrysotile) associated with 12’ floor tile located in the 1st wing on the second floor; approximately 2,500 ft^2
- Black floor tile mastic (0.68% Chrysotile) associated with 12’ floor tile located in the 1st wing on the second floor; approximately 1,500 ft^2
- Orange carpet mastic (0.58% Chrysotile) associated with the carpet located in the 3rd wing on the second floor; approximately 5,000 ft^2
- Tan and black floor tile mastic (0.69% Chrysotile, <1% Chrysotile) associated with 12’ gray floor tile located in the 3rd wing on the second floor; approximately 2,500 ft^2
- Floor tile mastic (0.27% Chrysotile) associated with 9’ green floor tile located on the first floor; approximately 1,200 ft^2
- Brown carpet mastic (0.61% Chrysotile) associated with the carpet located in the 4th wing on the second floor; approximately 2,500 ft^2
- Floor Tile Mastic (.50% Chrysotile) associated with the black and white floor tile located in the 4th wing on the second floor; approximately 2,500 ft^2

- Floor Tile Mastic (.59% Chrysotile) associated with the beige floor tile located in the 8th wing on the second floor; approximately 2,500 ft^2
- Sheet flooring mastic (.79% Chrysotile) associated with the red/orange sheet flooring located in the 9th wing on the second floor; approximately 2,500 ft^2

- Floor mastic (.44% Chrysotile) associated with the gray floor tile in the 7th wing on the second floor; approximately 1,500 ft^2

Asbestos-Containing Joint Compound

Layered analysis identified 2% Chrysotile in two of the twenty-four samples of joint compound. SCDHEC does not allow drywall and joint compound to be composited. Therefore, the joint compound, associated wallboard system, is considered ACM and must be removed and disposed of as such prior to removal or demolition of walls. Based on the age of the building and the likelihood of multiple renovations and repairs throughout the years, Terracon recommends additional sampling in effort to delineate asbestos in the wallboard (drywall/joint compound). This may be performed during the design phase of this project. If additional samples are not collected, all of the wallboard systems must be treated as ACM.

Damaged ACM

At the time of Terracon's survey, the ACM on the 1st floor is classified as in significantly damaged condition. The 1st floor, all surfaces and materials shall be considered contaminated. Additionally, other parts of the building have damaged ACM. Due to the damaged ACM it is strongly recommended to suspend access to these areas until the asbestos contamination is remediated.

Inaccessible Areas

Areas on the first floor did not appear safe to enter at the time of our investigation. Additionally, interior hallway bridges connecting the 2nd, 3rd, and 4th wing were inaccessible. These areas had damaged building materials obstructing access and were partially underwater as noted on Exhibit A-1. Asbestos-containing materials could exist in this area beyond what has been identified. Once made safe to enter, a licensed asbestos inspector should assess this area for asbestos.

Removal of ACM

The ACMs identified are currently damaged and should be handled in accordance with the applicable OSHA standards and SCDHEC Regulation 61-86.1. Written notification must be submitted to SCDHEC ten (10) business days prior to the renovation or demolition activities. In accordance with SCDHEC asbestos regulations, any facility removing or cleaning greater than 3,000 ft^2 of regulated ACM (i.e. joint compound/wallboard material) requires a written abatement project design. The project design shall be prepared by a SCDHEC licensed abatement designer to meet SCDHEC Asbestos Regulation 61-86.1. In addition, air monitoring is required in accordance with SCDHEC regulations

If load-bearing walls are scheduled to be removed as part of this renovation project, a SCDHEC demolition permit is required. A copy of this report must be submitted to SCDHEC (Asbestos Section) at least ten (10) working days prior to demolition of load-bearing walls along with a demolition permit application and associated fees. Once processed SCDHEC will issue a permit.

Federal, state and local regulations should be referred to in order to verify compliance before any actions are initiated on an ACM.

Materials Containing Less Than 1% Asbestos

Materials listed above with an asbestos concentration of <1% are not classified as an ACM by NESHAP and SCDHEC for removal and disposal purposes. However, the removal of the is considered Class II asbestos work by OSHA and should be done under controlled conditions by trained personnel in accordance with the requirements of OSHA Standard 29 CFR 1926.1101. Employer exposures to airborne asbestos fibers must be maintained at or below 0.1 fibers per cc

General

In accordance with OSHA's Asbestos Standard, the employer shall notify affected employees and contractors of the presence and location of asbestos-containing materials and test results. A full copy of the OSHA asbestos standard for general industry may be found at OSHA's website (www.osha.gov) and should be referenced for specific information.

It should be noted that suspect materials, other than those identified during the January 23-24 and February 18, 2020, survey may exist within the structure. Should suspect materials other than those which were identified during this survey be uncovered during or prior to the abatement and demolition process, those materials should be assumed asbestos-containing until sampling and analysis can confirm or refute their asbestos content. Should future sampling indicate that the other material is asbestos containing, Terracon recommends removal of the asbestos-containing materials by a South Carolina licensed asbestos abatement contractor prior to renovation/demolition of the building.

4.0 LEAD-BASED PAINT SURVEY

4.1 Regulatory Overview

Lead is regulated by the EPA, SCDHEC and OSHA. The EPA and SCDHEC regulate lead use, removal, and disposal, and OSHA regulates lead exposure to workers. The EPA defines LBP as paint, varnish, stain, or other applied coating that contains lead equal to or greater than 1.0 mg/cm^2, 5,000 mg/kg, or 0.5% by dry weight as determined by laboratory analysis. The SCDHEC regulations 61-107.19 require that painted demolition debris with a lead concentration greater than 0.06% by weight be disposed in a permitted Class II landfill. For the purpose of the OSHA lead standard, lead includes metallic lead, all inorganic lead compounds, and organic lead soaps. The complete OSHA standard for compliance can be found on OSHA's website (www.osha.gov). A synopsis of the OSHA regulations (29 CFR 1926.62) and the applicability are as follows:

The OSHA *Lead Standard for Construction* (29 CFR 1926.62) applies to all construction work where an employee may be occupationally exposed to lead. All work related to construction, alteration, or repair (including painting and decorating) is included. The lead-in-construction standard applies to any detectable concentration of lead in paint, as even small concentrations of lead can result in unacceptable employee exposures depending upon on the method of removal

and other workplace conditions. Under this standard, construction includes, but is not limited to, the following:

- Demolition or salvage of structures where lead or materials containing lead are present
- Removal or encapsulation of materials containing lead
- New construction, alteration, repair, or renovation of structures, substrates, or portions containing lead, or materials containing lead
- Installation of products containing lead
- Lead contamination/emergency clean-up
- Transportation, disposal, storage, or containment of lead or materials containing lead on the site or location at which construction activities are performed
- Maintenance operations associated with construction activities described above

4.2 Sampling and Analytical Protocol

Mr. Langford of Terracon conducted the lead-based paint (LBP) sampling on January 24, 2020. The LBP sampling was conducted by collecting paint chip samples. The paint chip samples were collected from painted or lacquered surfaces of building components likely to contain LBP, based on apparent date of application. The paint samples were collected down to the surface substrate so as to include any underlying paint systems in the analysis. The random paint chip samples were selected based on current paint schemes and may not be inclusive of old paint systems covered with paneling, or existing painted systems. The paint chip samples were submitted to an ELAP accredited laboratory for analysis of lead by NIOSH Method 7082M (atomic absorption).

4.3 Findings and Recommendations

Twelve (12) paint-chip samples were collected from the components of the structure on the site. Three (3) sample results were above the EPA definition of lead paint of 0.5%. Eleven (11) samples were above the SCDHEC 0.06% by weight threshold for disposal. All paints should be considered lead-containing.

Painted demolition debris may be disposed in a C&D Landfill. SCDHEC regulations require that the lead painted demolition debris be disposed in a permitted Class II landfill. Landfills should be contacted to determine their specific disposal requirements. Metal components painted with lead-based paint may be recycled; however, the recycler should be contacted to determine their specific requirements. A summary of the lead paint laboratory results is presented in Table 2 in Appendix A. The analytical report is included in Appendix B

5.0 LIMITATIONS / GENERAL COMMENTS

This survey was conducted in a manner consistent with the level of care and skill ordinarily exercised by members of the profession currently practicing under similar conditions in the same

locale. The results, findings, conclusions and recommendations expressed in this report are based on conditions observed during our survey of the renovation areas. The information contained in this report is relevant to the date on which this survey was performed, and should not be relied upon to represent conditions at a later date.

This report has been prepared on behalf of and exclusively for use by Palmetto Railways for specific application to their project as discussed. Terracon does not warrant the work of regulatory agencies, laboratories or other third parties supplying information, which may have been used in the preparation of this report. No warranty, express or implied is made.

This report is not a bidding document. Contractors or consultants reviewing this report must draw their own conclusions regarding further investigation or remediation deemed necessary.

APPENDIX A

TABLES

TABLE 1
ASBESTOS RESULTS SAMPLE SUMMARY
OLD HOSPITAL
HOSPITAL DISTRICT - FORMER NAVY YARD
CHARLESTON, SOUTH CAROLINA
TERRACON PROJECT NO. EN197470

Sample Number	Sample Location	Analysis Method	Analytical Results	Sample Description	HA	Classification	Friable/Non-Friable & Current Condition	Estimated Quantity (Square Feet)
2-1-DWJC-03	**2nd Floor - 1st Wing**	**PLM**	**2 % Chrysotile**	**Joint Compound**	HA-01	Surfacing/RACM	Friable/Significantly Damaged	150,000 SF
2-2-DWJC-01	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Joint Compound				
2-2-DWJC-02	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Joint Compound				
2-2-DWJC-03	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Joint Compound				
2-3-DWJC-01	2nd Floor - 3rd Wing	PLM	No Asbestos Detected	Joint Compound				
2-3-DWJC-02	2nd Floor - 3rd Wing	PLM	No Asbestos Detected	Joint Compound				
2-3-DWJC-03	2nd Floor - 3rd Wing	PLM	No Asbestos Detected	Joint Compound				
2-4-DWJC-01	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Joint Compound				
2-4-DWJC-02	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Joint Compound				
2-4-DWJC-03	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Joint Compound				
2-5-DWJC-01	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Joint Compound				
2-5-DWJC-02	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Joint Compound				
2-5-DWJC-03	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Joint Compound				
2-1-DWJC-01	2nd Floor - 1st Wing	PLM	No Asbestos Detected	Drywall	HA-02	Miscellaneous		
2-1-DWJC-02	2nd Floor - 1st Wing	PLM	No Asbestos Detected	Drywall				
2-1-DWJC-03	2nd Floor - 1st Wing	PLM	No Asbestos Detected	Drywall				
2-2-DWJC-01	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Drywall				
2-2-DWJC-02	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Drywall				
2-2-DWJC-03	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Drywall				
2-3-DWJC-01	2nd Floor - 3rd Wing	PLM	No Asbestos Detected	Drywall				
2-3-DWJC-02	2nd Floor - 3rd Wing	PLM	No Asbestos Detected	Drywall				
2-3-DWJC-03	2nd Floor - 3rd Wing	PLM	No Asbestos Detected	Drywall				
2-4-DWJC-01	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Drywall				
2-4-DWJC-02	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Drywall				
2-4-DWJC-03	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Drywall				
2-5-DWJC-01	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Drywall				
2-5-DWJC-02	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Drywall				
2-5-DWJC-03	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Drywall				
1-WB-01	1st Floor - 1st Wing	PLM	No Asbestos Detected	Joint Compound	HA-03	Surfacing/RACM	Friable/Significantly Damaged	20,000 SF
1-WB-02	1st Floor -1st Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-03	1st Floor -1st Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-04	1st Floor -1st Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-05	1st Floor -1st Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-06	1st Floor - 2nd Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-07	**1st Floor - 2nd Wing**	**PLM**	**2 % Chrysotile**	**Joint Compound**				
1-WB-08	1st Floor - 3rd Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-09	1st Floor - 4th Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-10	1st Floor - 4th Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-11	1st Floor - 5th Wing	PLM	No Asbestos Detected	Joint Compound				
1-WB-01	1st Floor - 1st Wing	PLM	No Asbestos Detected	Drywall	HA-04	Miscellaneous		
1-WB-02	1st Floor -1st Wing	PLM	No Asbestos Detected	Drywall				
1-WB-03	1st Floor	PLM	No Asbestos Detected	Drywall				
1-WB-04	1st Floor	PLM	No Asbestos Detected	Drywall				
1-WB-05	1st Floor	PLM	No Asbestos Detected	Drywall				
1-WB-06	1st Floor - 2nd Wing	PLM	No Asbestos Detected	Drywall				
1-WB-07	1st Floor - 2nd Wing	PLM	No Asbestos Detected	Drywall				

TABLE 1
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OLD HOSPITAL
HOSPITAL DISTRICT - FORMER NAVY YARD
CHARLESTON, SOUTH CAROLINA
TERRACON PROJECT NO. EN197470

Sample Number	Sample Location	Analysis Method	Analytical Results	Sample Description	HA	Classification	Friable/Non-Friable & Current Condition	Estimated Quantity (Square Feet)
2-1-CT-01	2nd Floor - 1st Wing	PLM	No Asbestos Detected	2x4 White Ceiling Tile	HA-05	Miscellaneous	Friable/Significantly Damaged	250,000 SF
2-2-CT-01	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	2x4 White Ceiling Tile				
2-3-CT-02	2nd Floor - 3rd Wing	PLM	No Asbestos Detected	2x4 White Ceiling Tile				
2-4-CT-02	2nd Floor - 4th Wing	PLM	No Asbestos Detected	2x4 White Ceiling Tile				
1-AT-01	1st Floor - Wing 3	PLM	No Asbestos Detected	2x2 Acoustic Tile	HA-06	Miscellaneous	Friable/Significantly Damaged	1,500 SF
1-AT-02	1st Floor - Wing 3	PLM	No Asbestos Detected	2x2 Acoustic Tile				
1-AT-03	1st Floor - Wing 3	PLM	No Asbestos Detected	2x2 Acoustic Tile				
2-H-WG-01	2nd Floor Hallway	PLM	No Asbestos Detected	Beige Window Glazing	HA-07	Miscellaneous	Non-Friable/Damaged	5,000 SF
2-H-WG-02	2nd Floor Hallway	PLM	No Asbestos Detected	Beige Window Glazing				
2-H-WG-03	3rd Floor Hallway	TEM	No Asbestos Detected	Beige Window Glazing				
2-H-WC-01	2nd Floor Hallway	PLM	No Asbestos Detected	White Window Caulking	HA-08	Miscellaneous	Non-Friable/Damaged	5,000 SF
2-H-WC-02	2nd Floor Hallway	PLM	No Asbestos Detected	White Window Caulking				
2-H-WC-03	2nd Floor Hallway	TEM	No Asbestos Detected	White Window Caulking				
2-4-PT-01	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Silver 'Pipe Taping	HA-09	Miscellaneous	Non-Friable/Damaged	1,500 LF
2-4-PT-02	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Silver 'Pipe Taping				
2-4-PT-03	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Silver 'Pipe Taping				
2-5-WC-01	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Brown Wall Caulking	HA-10	Miscellaneous	Non-Friable/Damaged	1,500 SF
2-5-WC-02	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Brown Wall Caulking				
2-5-WC-03	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Brown Wall Caulking				
2-H-BBM-01	2nd Floor Hallway	PLM	No Asbestos Detected	Beige Baseboard Mastic	HA-11	Miscellaneous	Non-Friable/Damaged	150,000 LF
2-H-BBM-02	2nd Floor Hallway	PLM	No Asbestos Detected	Beige Baseboard Mastic				
2-H-BBM-03	2nd Floor Hallway	PLM	No Asbestos Detected	Beige Baseboard Mastic				
2-H-SF-01	**2nd Floor Hall**	**PLM**	**12 % Chrysotile**	**Hallway Sheetflooring**	HA-12	Miscellaneous/RACM	Friable/Damaged	21,000 SF
2-H-SF-02	**2nd Floor Hall**	**PLM**	**15 % Chrysotile**	**Hallway Sheetflooring**				
2-H-SF-03	**2nd Floor Hall**	**TEM**	**Positive Stop**	**Hallway Sheetflooring**				
2-H-SF-01	2nd Floor Hall	PLM	No Asbestos Detected	Mastic Under Sheetflooring	HA-13			
2-H-SF-02	2nd Floor Hall	PLM	No Asbestos Detected	Mastic Under Sheetflooring				
2-H-SF-03	2nd Floor Hall	TEM	.58 % Chrysotile	Mastic Under Sheetflooring				
2-1-CM-01	2nd Floor - 1st Wing	PLM	No Asbestos Detected	Green Mastic Under 12' Floor Tile	HA-14	Miscellaneous	Non-Friable/Good	2,500 SF
2-1-CM-02	2nd Floor - 1st Wing	PLM	No Asbestos Detected	Green Mastic Under 12' Floor Tile				
2-1-CM-03	2nd Floor - 1st Wing	TEM	0.56 % Chrysotile	Green Mastic Under 12' Floor Tile				
2-1-CM2-01	2nd Floor 1st Wing	PLM	No Asbestos Detected	Mastic Under Orange Carpet	HA-15	Miscellaneous	Non-Friable/Good	1,500 SF
2-1-CM2-02	2nd Floor 1st Wing	PLM	No Asbestos Detected	Mastic Under Orange Carpet				
2-1-CM2-03	2nd Floor 1st Wing	TEM	No Asbestos Detected	Mastic Under Orange Carpet				
2-1-CM2-01	2nd Floor 1st Wing	PLM	No Asbestos Detected	Backing Under Orange Carpet	HA-16	Miscellaneous	Non-Friable/Good	1,500 SF
2-1-CM2-02	2nd Floor 1st Wing	PLM	No Asbestos Detected	Backing Under Orange Carpet				
2-1-CM2-03	2nd Floor 1st Wing	PLM	No Asbestos Detected	Backing Under Orange Carpet				
2-1-FTM-01	2nd Floor 1st Wing	PLM	<1 % Chrysotile	Black Floor Tile Mastic	HA-17	Miscellaneous	Non-Friable/Good	1,500 SF
2-1-FTM-02	2nd Floor 1st Wing	PLM	<1% Chrysotile	Black Floor Tile Mastic				
2-1-FTM-03	2nd Floor 1st Wing	TEM	0.68 % Chrysotile	Black Floor Tile Mastic				
2-H-CM-01	Outside 2nd Floor - 1st Wing	PLM	No Asbestos Detected	Orange Mastic Under Blue Carpet	HA-18	Miscellaneous	Non-Friable/Good	1,000 SF
2-H-CM-02	Outside 2nd Floor - 1st Wing	PLM	No Asbestos Detected	Orange Mastic Under Blue Carpet				
2-H-CM-03	Outside 2nd Floor - 1st Wing	TEM	No Asbestos Detected	Orange Mastic Under Blue Carpet				
2-2-CM-01	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Orange Carpet Mastic	HA-19	Miscellaneous	Non-Friable/Good	5,000 SF
2-2-CM-02	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Orange Carpet Mastic				
2-2-CM-03	2nd Floor - 2nd Wing	TEM	No Asbestos Detected	Orange Carpet Mastic				

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OLD HOSPITAL
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CHARLESTON, SOUTH CAROLINA
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Sample Number	Sample Location	Analysis Method	Analytical Results	Sample Description	HA	Classification	Friable/Non-Friable & Current Condition	Estimated Quantity (Square Feet)
2-3 CM-01	2nd Floor - 3rd Wing	PLM	<1 % Chrysotile	Orange Carpet Mastic	HA-20	Miscellaneous	Non-Friable/Good	5,000 SF
2-3 CM-02	2nd Floor - 3rd Wing	PLM	<1 % Chrysotile	Orange Carpet Mastic				
2-3 CM-03	2nd Floor - 3rd Wing	TEM	0.58 % Chrysotile	Orange Carpet Mastic				
2-3-FT-01	**2nd Floor - 3rd Wing**	**PLM**	**8 % Chrysotile**	**Gray 12x12 Floor Tile**	**HA-21**	**Miscellaneous/ RACM**	**Friable/Damaged**	**2,500 SF**
2-3-FT-02	**2nd Floor - 3rd Wing**	**PLM**	**10 % Chrysotile**	**Gray 12x12 Floor Tile**				
2-3-FT-03	**2nd Floor - 3rd Wing**	**TEM**	**Positive Stop**	**Gray 12x12 Floor Tile**				
2-3-FT-01	**2nd Floor - 3rd Wing**	**PLM**	**No Asbestos Detected**	**Tan Top Layer Mastic Under HA-19**	**HA-22**			
2-3-FT-02	**2nd Floor - 3rd Wing**	**PLM**	**No Asbestos Detected**	**Tan Top Layer Mastic Under HA-19**				
2-3-FT-03	**2nd Floor - 3rd Wing**	**TEM**	**0.69 % Chrysotile**	**Tan Top Layer Mastic Under HA-19**				
2-3-FT-01	**2nd Floor - 3rd Wing**	**PLM**	**<1% Chysotile**	**Black Bottom Layer Mastic Under HA-19**	**HA-23**			
2-3-FT-02	**2nd Floor - 3rd Wing**	**PLM**	**No Asbestos Detected**	**Black Bottom Layer Mastic Under HA-20**				
2-3-FT-03	**2nd Floor - 3rd Wing**	**TEM**	**No Asbestos Detected**	**Black Bottom Layer Mastic Under HA-21**				
1-FT1-01	**1st Floor**	**PLM**	**2 % Chrysotile**	**Tan12x12 Floor Tile**	**HA-24**	**Miscellaneous/ RACM**	**Friable/Damaged**	**7,500 SF**
1-FT1-02	**1st Floor**	**PLM**	**4 % Chrysotile**	**Tan12x12 Floor Tile**				
1-FT1-03	**1st Floor**	**TEM**	**Positive Stop**	**Tan12x12 Floor Tile**				
1-FT1-01	**1st Floor**	**PLM**	**6 % Chrysotile**	**Black Floor Tile Mastic**	**HA-25**			
1-FT1-02	**1st Floor**	**PLM**	**6 % Chrysotile**	**Black Floor Tile Mastic**				
1-FT1-03	**1st Floor**	**TEM**	**Positive Stop**	**Black Floor Tile Mastic**				
1-FT2-01	**1st Floor**	**PLM**	**3 % Chysotile**	**9" Green Floor Tile**	**HA-26**	**Miscellaneous/ RACM**	**Friable/Damaged**	**1,200 SF**
1-FT2-02	**1st Floor**	**PLM**	**4 % Chrysotile**	**9" Green Floor Tile**				
1-FT2-03	**1st Floor**	**TEM**	**Positive Stop**	**9" Green Floor Tile**				
1-FT2-01	**1st Floor**	**PLM**	**No Asbestos Detected**	**Floor Tile Mastic**	**HA-27**			
1-FT2-02	**1st Floor**	**PLM**	**No Asbestos Detected**	**Floor Tile Mastic**				
1-FT2-03	**1st Floor**	**TEM**	**0.27 % Chrysotile**	**Floor Tile Mastic**				
2-5-CM-01	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Orange Carpet Mastic	HA-28	Miscellaneous	Non-Friable	7,500 SF
2-5-CM-02	2nd Floor - 5th Wing	PLM	No Asbestos Detected	Orange Carpet Mastic				
2-5-CM-03	2nd Floor - 5th Wing	TEM	No Asbestos Detected	Orange Carpet Mastic				
2-4-CM-01	2nd Floor - 4th Wing	PLM	<1 % Chrysotile	Brown Carpet Mastic	HA-29	Miscellaneous	Non-Friable	2,500 SF
2-4-CM-02	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Brown Carpet Mastic				
2-4-CM-03	2nd Floor - 4th Wing	TEM	0.61 % Chrysotile	Brown Carpet Mastic				
1-PI-01	1st Floor	PLM	No Asbestos Detected	Pipe - Wrap	HA-30	TSI	Friable/Good	1,500 LF
1-PI-02	1st Floor	PLM	No Asbestos Detected	Pipe - Wrap				
1-PI-03	1st Floor	PLM	No Asbestos Detected	Pipe - Wrap				
1-PI-01	1st Floor	PLM	No Asbestos Detected	Pipe - Insulation	HA-31			
1-PI-02	1st Floor	PLM	No Asbestos Detected	Pipe - Insulation				
1-PI-03	1st Floor	PLM	No Asbestos Detected	Pipe - Insulation				
PI-01	**1st Floor - Hallway**	**PLM**	**2 % Amosite; 35 % Chrysotile**	**White 10" Pipe Insulation**	**HA-32**	**TSI/RACM**	**Friable/Damaged**	**1,200 LF**
PI-02	**1st Floor - Hallway**	**PLM**	**8 % Amosite; 30 % Chrysotile**	**White 4" Pipe Insulation**				
PI-03	**1st Floor - Wing 1**	**PLM**	**5 % Amosite; 35 % Chrysotile**	**Green 4" Pipe Insulation**				
PI-03	1st Floor - Wing 1	PLM	No Asbestos Detected	Green 4 Pipe Insulation Wrap				

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CHARLESTON, SOUTH CAROLINA
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Sample Number	Sample Location	Analysis Method	Analytical Results	Sample Description	HA	Classification	Friable/Non-Friable & Current Condition	Estimated Quantity (Square Feet)
D-01	**1st Floor - Wing 1**	**PLM**	**20 % Amosite; 10 % Chysotile**	**Pipe Debris on Floor in Hall/Wings**	**HA-33**	**TSI/RACM**	**Friable/Significantly Damaged**	**30,000 SF (contaminated flooring/derbis)**
D-02	**1st Floor - Wing 4**	**PLM**	**20 % Amosite; 10 % Chysotile**	**Pipe Debris on Floor in Hall/Wings**				
D-03	**1st Floor - Wing 4**	**PLM**	**20 % Amosite; 10 % Chysotile**	**Pipe Debris on Floor in Hall/Wings**				
D-04	**1st Floor - Wing 3**	**PLM**	**25 % Amosite; 10 % Chysotile**	**Pipe Debris on Floor in Hall/Wings**				
D-05	**1st Floor - Wing 3**	**PLM**	**20 % Amosite; 15 % Chysotile**	**Pipe Debris on Floor in Hall/Wings**				
D-06	**1st Floor - Wing 2**	**PLM**	**20 % Amosite; 10 % Chysotile**	**Pipe Debris on Floor in Hall/Wings**				
E-PE-01	**Exterior Boiler Room**	**PLM**	**No Asbestos Detected**	**Pipe Elbow Wrap**	**HA-34**	**TSI/RACM**	**Friable/Damaged**	**1 Elbow**
E-PE-01	**Exterior Boiler Room**	**PLM**	**2 % Amosite**	**Pipe Elbow Insulation**				
E-PW-01	Exterior Boiler Room -1	PLM	No Asbestos Detected	Pipe Insulation	HA-35	TSI	Friable/Damaged	30 LF
E-PW-02	Exterior Boiler Room -1	PLM	No Asbestos Detected	Pipe Insulation				
E-PW-03	Exterior Boiler Room -1	PLM	No Asbestos Detected	Pipe Insulation				
E-GI-01	**Exterior Boiler Room - Door**	**PLM**	**60 % Chrysotile**	**Door Gasket**	**HA-36**	**Miscellaneous/ Category I**	**Friable/Damaged**	**20 LF**
E-GI-02	**Exterior Boiler Room - Door**	**PLM**	**60 % Chrysotile**	**Door Gasket**				
E-GI-03	**Exterior Boiler Room - Door**	**PLM**	**60 % Chrysotile**	**Door Gasket**				
E-DI-01	Exterior Boiler Room -1	PLM	No Asbestos Detected	Door Insulation	HA-37	TSI	Friable/Damaged	20 SF
E-DI-02	Exterior Boiler Room -1	PLM	No Asbestos Detected	Door Insulation				
E-DI-03	Exterior Boiler Room -1	PLM	No Asbestos Detected	Door Insulation				
E-PI-01	Exterior Boiler Room -1	PLM	No Asbestos Detected	White Pipe Insulation	HA-38	TSI	Friable/Damaged	20 LF
E-PI-02	Exterior Boiler Room -1	PLM	No Asbestos Detected	White Pipe Insulation				
E-PI-03	Exterior Boiler Room -1	PLM	No Asbestos Detected	White Pipe Insulation				
E-PI-01	Exterior Boiler Room -1	PLM	No Asbestos Detected	Pipe Insulation Wrap				
E-PI-02	Exterior Boiler Room -1	PLM	No Asbestos Detected	Pipe Insulation Wrap				
E-PI-03	Exterior Boiler Room -1	PLM	No Asbestos Detected	Pipe Insulation Wrap				
E-BI-01	Exterior Boiler Room -1	PLM	No Asbestos Detected	Gray Boiler Insulation	HA-39	TSI	Friable/Damaged	150 SF
E-BI-02	Exterior Boiler Room -1	PLM	No Asbestos Detected	Gray Boiler Insulation				
E-BI-03	Exterior Boiler Room -1	PLM	No Asbestos Detected	Gray Boiler Insulation				
E-BI2-01	Exterior Boiler Room 2	PLM	No Asbestos Detected	Gray Boiler Insulation	HA-40	TSI	Friable/Damaged	150 SF
E-BI2-02	Exterior Boiler Room 2	PLM	No Asbestos Detected	Gray Boiler Insulation				
E-BI2-03	Exterior Boiler Room 2	PLM	No Asbestos Detected	Gray Boiler Insulation				
E-GM2-01	Exterior Boiler Room 2	PLM	No Asbestos Detected	Gasket	HA-41	TSI	Friable/Damaged	20 LF
E-GM2-02	Exterior Boiler Room 2	PLM	No Asbestos Detected	Gasket				
E-GM2-03	Exterior Boiler Room 2	PLM	No Asbestos Detected	Gasket				
E-PI2	Exterior Boiler Room 2	PLM	No Asbestos Detected	White Outside Pipe Insulation	HA-42	TSI	Friable/Damaged	120 LF
E-PI3	Exterior Boiler Room 2	PLM	No Asbestos Detected	White Outside Pipe Insulation				
E-PI4	Exterior Boiler Room 2	PLM	No Asbestos Detected	White Outside Pipe Insulation				
FD-01	2nd Floor Main	PLM	No Asbestos Detected	Fire Door	HA-43	TSI	Friable/Damaged	15 SF
FD-02	2nd Floor Main	PLM	No Asbestos Detected	Fire Door				
FD-03	2nd Floor Main	PLM	No Asbestos Detected	Fire Door				
RF-01	Roof	PLM	No Asbestos Detected	Roofing Felt	HA-44	Miscellaneous	Non-Friable/Damaged	150,00 SF
RF-02	Roof	PLM	No Asbestos Detected	Roofing Felt				
RF-03	Roof	TEM	No Asbestos Detected	Roofing Felt				
2-E-PI-01	**2nd Floor Entrance (South)**	**PLM**	**10% Amosite; 4% Chrysotile**	**White Pipe Insulation (Debris)**	**HA-45**	**TSI/RACM**	**Friable/Damaged**	**2,500 SF**
2-E-PI-02	**2nd Floor Entrance (South)**	**PLM**	**10% Amosite; 4% Chrysotile**	**White Pipe Insulation (Debris)**				
2-E-PI-03	**2nd Floor Entrance (South)**	**PLM**	**8% Amosite; 4% Chrysotile**	**White Pipe Insulation (Debris)**				

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Sample Number	Sample Location	Analysis Method	Analytical Results	Sample Description	HA	Classification	Friable/Non-Friable & Current Condition	Estimated Quantity (Square Feet)
2-2-FT-01	**2nd Floor - 2nd Wing**	**PLM**	**6% Chrysotile**	**Beige Floor Tile**	**HA-46**	**Miscellaneous**	**Friable/Damaged**	**2,500 SF**
2-2-FT-02	**2nd Floor - 2nd Wing**	**PLM**	**5% Chrysotile**	**Beige Floor Tile**				
2-2-FT-03	**2nd Floor - 2nd Wing**	**TEM**	**Positive Stop**	**Beige Floor Tile**				
2-2-FT-01	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Tan Top Layer Mastic	HA-47	Miscellaneous	Friable/Damaged	2,500 SF
2-2-FT-02	2nd Floor - 2nd Wing	PLM	No Asbestos Detected	Tan Top Layer Mastic				
2-2-FT-03	2nd Floor - 2nd Wing	TEM	No Asbestos Detected	Tan Top Layer Mastic				
2-2-FT-01	**2nd Floor - 2nd Wing**	**PLM**	**6% Chrysotile**	**Black Bottom Layer Mastic**	**HA-48**	**Miscellaneous**	**Friable/Damaged**	**2,500 SF**
2-2-FT-02	**2nd Floor - 2nd Wing**	**PLM**	**4% Chysotile**	**Black Bottom Layer Mastic**				
2-2-FT-03	**2nd Floor - 2nd Wing**	**TEM**	**Positive Stop**	**Black Bottom Layer Mastic**				
2-4-FT-01	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Black/White Floor Tile	HA-49	Miscellaneous	Friable/Damaged	2,500 SF
2-4-FT-02	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Black/White Floor Tile				
2-4-FT-03	2nd Floor - 4th Wing	TEM	No Asbestos Detected	Black/White Floor Tile				
2-4-FT-01	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Gray Mastic	HA-50	Miscellaneous	Friable/Damaged	2,500 SF
2-4-FT-02	2nd Floor - 4th Wing	PLM	No Asbestos Detected	Gray Mastic				
2-4-FT-03	2nd Floor - 4th Wing	TEM	.50% Chysotile	Gray Mastic				
2-1-FT-01	**2nd Floor - 1st Wing**	**PLM**	**8% Chysotile**	**Beige Floor Tile**	**HA-51**	**Miscellaneous**	**Friable/Damaged**	**2,500 SF**
2-1-FT-02	**2nd Floor - 1st Wing**	**PLM**	**8% Chysotile**	**Beige Floor Tile**				
2-1-FT-03	**2nd Floor - 1st Wing**	**TEM**	**Positive Stop**	**Beige Floor Tile**				
2-8-FT-01	**2nd Floor - 8th Wing**	**PLM**	**8% Chysotile**	**Beige Floor Tile**	**HA-52**	**Miscellaneous**	**Friable/Damaged**	**2,500 SF**
2-8-FT-02	**2nd Floor - 8th Wing**	**PLM**	**8% Chysotile**	**Beige Floor Tile**				
2-8-FT-03	**2nd Floor - 8th Wing**	**TEM**	**Positive Stop**	**Beige Floor Tile**				
2-8-FT-01	2nd Floor - 8th Wing	PLM	No Asbestos Detected	Top Layer Tan Mastic	HA-53	Miscellaneous	Friable/Damaged	2,500 SF
2-8-FT-02	2nd Floor - 8th Wing	PLM	No Asbestos Detected	Top Layer Tan Mastic				
2-8-FT-03	2nd Floor - 8th Wing	TEM	.59% Chrysotile	Top Layer Tan Mastic				
2-8-FT-01	**2nd Floor - 8th Wing**	**PLM**	**<1% Chrysotile**	**Bottom Layer Black Mastic**	**HA-54**	**Miscellaneous**	**Friable/Damaged**	**2,500 SF**
2-8-FT-02	**2nd Floor - 8th Wing**	**PLM**	**<1% Chrysotile**	**Bottom Layer Black Mastic**				
2-8-FT-03	**2nd Floor - 8th Wing**	**TEM**	**.75% Chysotile**	**Bottom Layer Black Mastic**				
2-9-SF-01	**2nd Floor - 9th Wing**	**PLM**	**15% Chrysotile**	**Red/Orange Sheet Flooring**	**HA-55**	**Miscellaneous**	**Friable/Damaged**	**2,500 SF**
2-9-SF-02	**2nd Floor - 9th Wing**	**PLM**	**15% Chrysotile**	**Red/Orange Sheet Flooring**				
2-9-SF-03	**2nd Floor - 9th Wing**	**TEM**	**Positive Stop**	**Red/Orange Sheet Flooring**				
2-9-SF-01	2nd Floor - 9th Wing	PLM	No Asbestos Detected	Red/Orange Sheet Flooring Beige Mastic	HA-56	Miscellaneous	Friable/Damaged	2,500 SF
2-9-SF-02	2nd Floor - 9th Wing	PLM	<1% Chysotile	Red/Orange Sheet Flooring Beige Mastic				
2-9-SF-03	2nd Floor - 9th Wing	TEM	.79% Chysotile	Red/Orange Sheet Flooring Beige Mastic				
2-EXT-TS-01	**2 Floor EXT Wing Connectors**	**PLM**	**15% Chrysotile; <1% Crocidolite**	**White Transite Siding**	**HA-57**	**Miscellaneous**	**Friable/Damaged**	**3,000 SF**
2-EXT-TS-02	**2 Floor EXT Wing Connectors**	**PLM**	**15% Chrysotile; <1% Crocidolite**	**White Transite Siding**				
2-EXT-TS-03	**2 Floor EXT Wing Connectors**	**PLM**	**15% Chrysotile; <1% Crocidolite**	**White Transite Siding**				
2-EXT-TS-01	**2 Floor EXT Wing Connectors**	**PLM**	**No Asbestos Detected**	**Black Felt under Siding**	**HA-58**	**Miscellaneous**	**Friable/Damaged**	**3,000 SF**
2-EXT-TS-02	**2 Floor EXT Wing Connectors**	**PLM**	**No Asbestos Detected**	**Black Felt under Siding**				
2-EXT-TS-03	**2 Floor EXT Wing Connectors**	**TEM**	**No Asbestos Detected**	**Black Felt under Siding**				
2-7-FT-01	2nd Floor - 7th Wing (Entrance)	PLM	No Asbestos Detected	Red Floor Tile	HA-59	Miscellaneous	Friable/Damaged	1,500 SF
2-7-FT-02	2nd Floor - 7th Wing (Entrance)	PLM	No Asbestos Detected	Red Floor Tile				
2-7-FT-03	2nd Floor - 7th Wing (Entrance)	TEM	No Asbestos Detected	Red Floor Tile				
2-7-FT-01	**2nd Floor - 7th Wing (Entrance)**	**PLM**	**2% Chysotile**	**Black and Yellow Mastic**	**HA-60**	**Miscellaneous**	**Friable/Damaged**	**1,500 SF**
2-7-FT-02	**2nd Floor - 7th Wing (Entrance)**	**PLM**	**3% Chysotile**	**Black and Yellow Mastic**				
2-7-FT-03	**2nd Floor - 7th Wing (Entrance)**	**TEM**	**Positive Stop**	**Black and Yellow Mastic**				
2-7-FT2-01	**2nd Floor - 7th Wing (End)**	**PLM**	**8% Chysotile**	**Gray Floor Tile**	**HA-61**	**Miscellaneous**	**Friable/Damaged**	**1,500 SF**
2-7-FT2-02	**2nd Floor - 7th Wing (End)**	**PLM**	**8% Chysotile**	**Gray Floor Tile**				
2-7-FT2-03	**2nd Floor - 7th Wing (End)**	**TEM**	**Positive Stop**	**Gray Floor Tile**				
2-7-FT2-01	2nd Floor - 7th Wing (End)	PLM	<1% Chysotile	Black Mastic				

TABLE 1
ASBESTOS RESULTS SAMPLE SUMMARY
OLD HOSPITAL
HOSPITAL DISTRICT - FORMER NAVY YARD
CHARLESTON, SOUTH CAROLINA
TERRACON PROJECT NO. EN197470

Sample Number	Sample Location	Analysis Method	Analytical Results	Sample Description	HA	Classification	Friable/Non-Friable & Current Condition	Estimated Quantity (Square Feet)
2-7-FT2-02	2nd Floor - 7th Wing (End)	PLM	<1% Chysotile	Black Mastic	HA-62	Miscellaneous	Friable/Damaged	1,500 SF
2-7-FT2-03	2nd Floor - 7th Wing (End)	TEM	.44% Chysotile	Black Mastic				
2-H-SC-01	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Skim Coat	HA-63	Surfacing	Friable/Damaged	100,000 SF
2-H-SC-02	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Skim Coat				
2-H-SC-03	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Skim Coat				
2-H-SC-04	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Skim Coat				
3-H-SC-05	3rd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Skim Coat				
3-H-SC-06	3rd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Skim Coat				
3-H-SC-07	3rd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Skim Coat				
2-H-PL-01	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat	HA-64	Miscellaneous	Friable/Damaged	100,000 SF
2-H-PL-02	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat				
2-H-PL-03	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat				
2-H-PL-04	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat				
2-H-PL-05	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat				
2-H-PL-06	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat				
2-H-PL-07	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat				
2-H-PL-08	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat				
2-H-PL-09	2nd Floor Main Hallway	PLM	No Asbestos Detected	Plaster Rough Coat				

1) Bold and shaded items are identified ACMs
2) Quantities listed above are estimates to be used for inspection purposes only and should be field-verified for all other uses.
3) Quantities listed above should not be used in construction documents or bids

HA - Homogeneous Area
PLM - Polarized Light Microscopy
TEM - Transmission Electron Microscopy

SF - Square Feet

LF - Linear Feet

TABLE 2
LEAD PAINT RESULTS SAMPLE SUMMARY
OLD HOSPITAL DISTRICT - OLD NAVY BASE
OLD HOSPITAL
1690 TURNBULL AVENUE
NORTH CHARLESTON, SOUTH CAROLINA
TERRACON PROJECT NO. EN197470

Sample Number	Description	Location	Lab Results % wt
Pb-01	White Wall Paint	Interior Wall 2nd Floor	1.0 %
Pb-02	White Wall Paint	Interior Wall 2nd Floor	1.8 %
Pb-03	Tan Wall Paint	Interior Wall 2nd Floor	1.0 %
Pb-04	White Door Frames	Door Frames 2nd Floor	.26 %
Pb-05	White Door Frames	Door Frames 2nd Floor	.37 %
Pb-06	Tan Door Frames	Door Frames 2nd Floor	.22 %
Pb-07	Beige Window Frame	Windows 2nd Floor	.16 %
Pb-08	Tan Window Frame	Windows 2nd Floor	.19 %
Pb-09	Tan Window Frame	Windows 2nd Floor	.92 %
Pb-10	Black Stairwell	Stairwell Comp.	<0.0080 %
Pb-11	White Stairwell	Stairwell Comp.	12 %
Pb-12	White Wall Paint	Stairwell Comp.	.62 %

Notes:

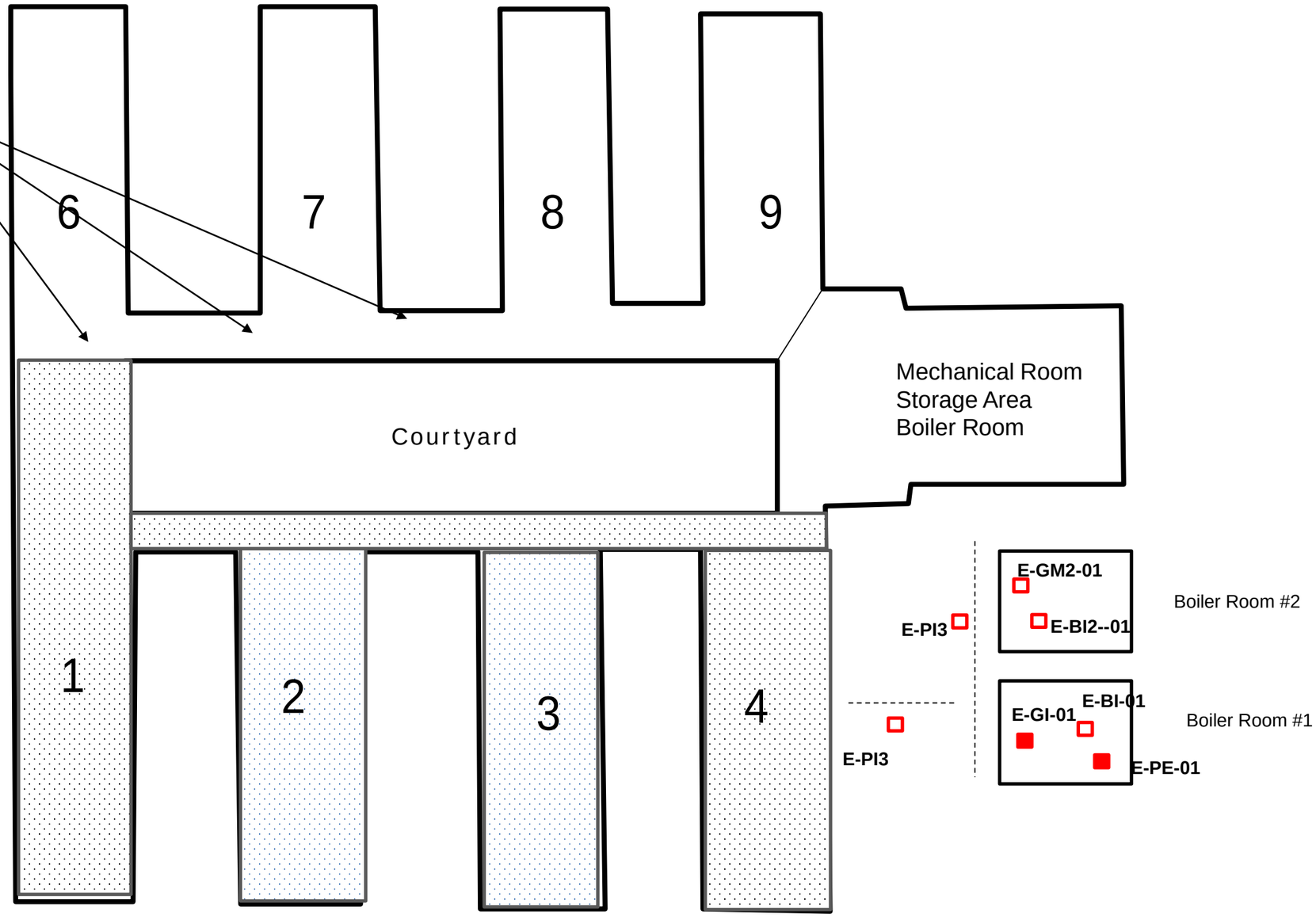
1) Results above the SCDHEC regulatory limit (0.06%) must be disposed of properly.
2) Results in BOLD face were found above action levels.
3) OSHA Lead in Construction standard must be followed.
4) Please refer to sample diagrams for sample locations.

APPENDIX B

SITE DIAGRAM WITH SAMPLE LOCATIONS

1st Floor

- Area Generally Unsafe to fully inspect.
- Partially under water
- Damaged building materials obstructing walkways from water damage



General area of contamination and damage observed during the inspection. Area is defined by visible observation only. The contaminated area may change due to the building being unoccupied and not fully secured. Others reviewing this area should make their own determination on the extents of contamination

N

Legend

- Asbestos Sample (Negative)
- Asbestos Sample (Positive)

Sample locations are approximated

PM: CCL	Project No. EN197470
Drawn By: AJM	Scale: N.T.S
Checked By: JAG	File Path:
Approved By: JAG	Date: 1/22/20

Terracon
1450 Fifth Street, West North Charleston, SC 29405
Phone: (843) 884 1234 Fax: (843) 884 9234

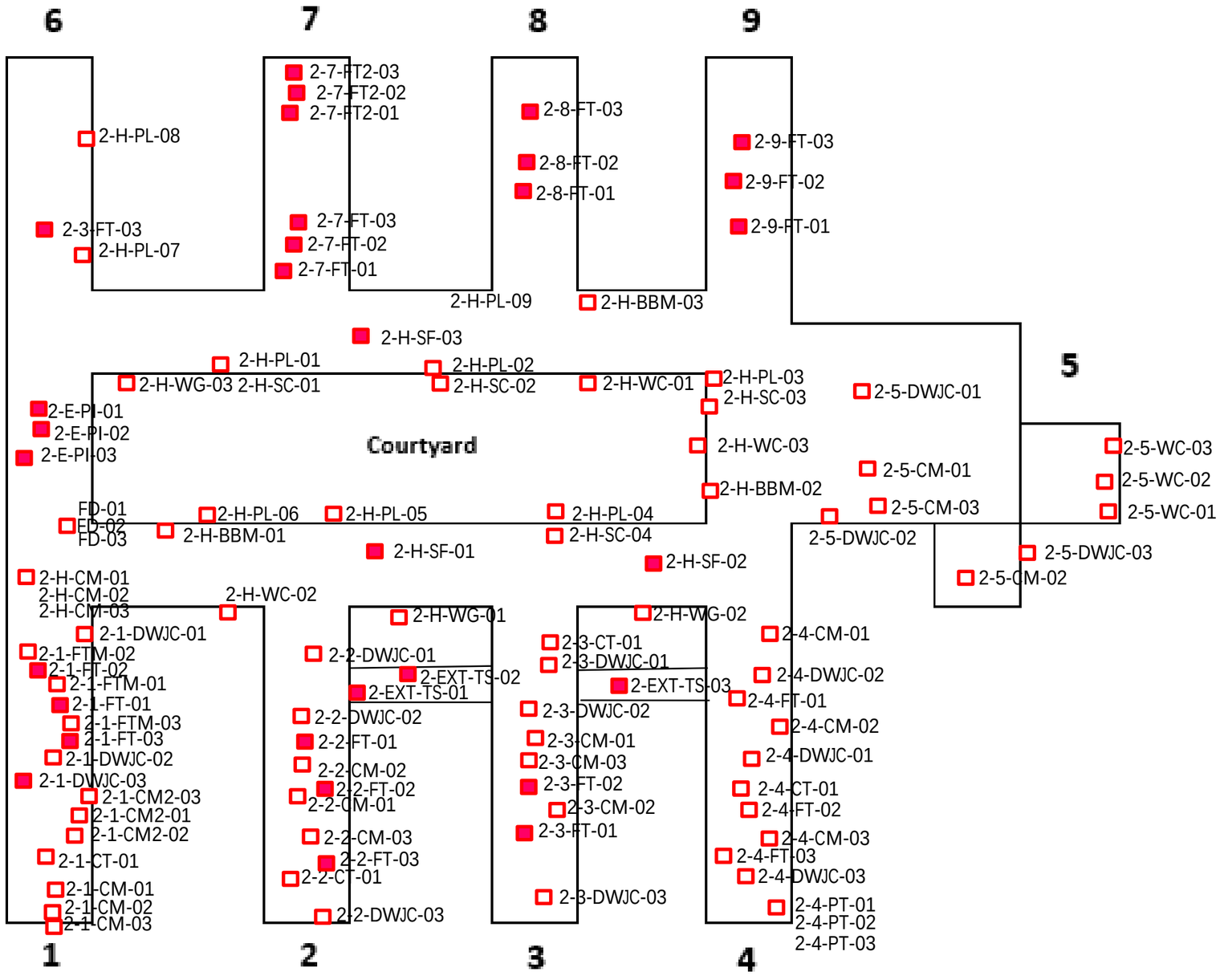
Approximate Sample Location Diagram

1st Floor (basement) Old Navy Hospital
Charleston, South Carolina

Charleston County South Carolina

EXHIBIT NO. A-1

2nd Floor



N

Legend

- Asbestos Sample (Negative)
- Asbestos Sample (Positive)

Sample locations are approximated

PM: CCL	Project No. EN197470
Drawn By: AJM	Scale: N.T.S
Checked By: JAG	File Path:
Approved By: JAG	Date: 2/20/20

Terracon
1450 Fifth Street, West North Charleston, SC 29405
Phone: (843) 884 1234 Fax: (843) 884 9234

Approximate Sample Location Diagram

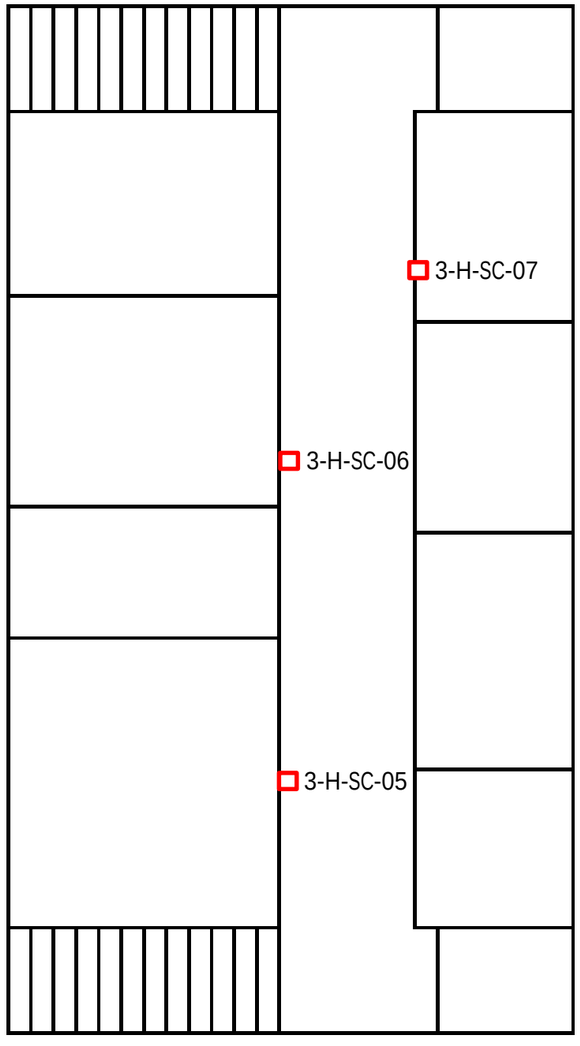
2nd Floor – Old Navy Hospital
Charleston, South Carolina

Charleston County South Carolina

EXHIBIT NO.

A-2

3rd Floor



Legend

N

- Asbestos Sample (Negative)
- Asbestos Sample (Positive)

Sample locations are approximated

PM:	CCL
Drawn By:	AJM
Checked By:	JAG
Approved By:	JAG

Project No.	EN197470
Scale:	N.T.S
File Path:	
Date:	2/20/20

Terracon
1450 Fifth Street, West North Charleston, SC 29405
Phone: (843) 884 1234 Fax: (843) 884 9234

Approximate Sample Location Diagram

3rd Floor - Old Navy Hospital
North Charleston, South Carolina

Charleston County South Carolina

EXHIBIT NO.

A-3

APPENDIX D

LABORATORY REPORTS

EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Attention: Andrew Mitroka
Terracon, Inc.
1450 Fifth Street West
North Charleston, SC 29405

Project: EN197470

Phone: (843) 884-1234
Fax: (843) 884-9234
Received Date: 01/27/2020 11:00 AM
Analysis Date: 01/28/2020 - 01/29/2020
Collected Date: 01/23/2020

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-1-DWJC-01-Drywall *412000831-0001* *No joint compound present*	2nd Floor - 1st Wing - Drywall & Joint Compound	Gray Fibrous Homogeneous	8% Cellulose 2% Glass	90% Non-fibrous (Other)	None Detected
2-1-DWJC-02-Drywall *412000831-0002* *No joint compound present*	2nd Floor - 1st Wing - Drywall & Joint Compound	Gray Fibrous Homogeneous	8% Cellulose	92% Non-fibrous (Other)	None Detected
2-1-DWJC-03-Drywall *412000831-0003*	2nd Floor - 1st Wing - Drywall & Joint Compound	Brown/Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
2-1-DWJC-03-Joint Compound *412000831-0003A*	2nd Floor - 1st Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 58% Non-fibrous (Other)	2% Chrysotile
2-1-CT-01 *412000831-0004*	2nd Floor - 1st Wing - Ceiling Tile	Gray/White Fibrous Heterogeneous	60% Cellulose 10% Glass	15% Perlite 15% Non-fibrous (Other)	None Detected
2-1-CM-01 *412000831-0005* *Sample not submitted*	2nd Floor - 1st Wing - 12" Green Tile - Orange Mastic				Not Submitted
2-1-CM-02-Mastic *412000831-0006* *No flooring present*	2nd Floor - 1st Wing - 12" Green Tile - Orange Mastic	Green Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
2-1-CM2-01-Backing *412000831-0008*	2nd Floor - 1st Wing - Orange Carpet Mastic	Orange Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-1-CM2-01-Mastic *412000831-0008A*	2nd Floor - 1st Wing - Orange Carpet Mastic	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-1-CM2-02-Backing *412000831-0009*	2nd Floor - 1st Wing - Orange Carpet Mastic	Orange Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
2-1-CM2-02-Mastic *412000831-0009A*	2nd Floor - 1st Wing - Orange Carpet Mastic	Yellow Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
2-1-CM2-03-Backing *412000831-0009B*	2nd Floor - 1st Wing - Orange Carpet Mastic	Orange Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-1-FTM-01 *412000831-0011*	2nd Floor - 1st Wing - Black Floor Tile Mastic	Black Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	<1% Chrysotile
2-1-FTM-02 *412000831-0012*	2nd Floor - 1st Wing - Black Floor Tile Mastic	Black Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	<1% Chrysotile

Initial report from: 01/29/2020 10:23:01

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http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-H-SF-01-Flooring *412000831-0014*	Hallway - 2nd Floor - Tan Sheet Flooring & Orange Mastic	Gray/White Fibrous Heterogeneous		88% Non-fibrous (Other)	12% Chrysotile
2-H-SF-01-Mastic *412000831-0014A*	Hallway - 2nd Floor - Tan Sheet Flooring & Orange Mastic	Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
2-H-SF-02-Flooring *412000831-0015*	Hallway - 2nd Floor - Tan Sheet Flooring & Orange Mastic	Tan Fibrous Homogeneous	5% Cellulose	80% Non-fibrous (Other)	15% Chrysotile
2-H-SF-02-Mastic *412000831-0015A*	Hallway - 2nd Floor - Tan Sheet Flooring & Orange Mastic	Tan Non-Fibrous Homogeneous	2% Cellulose 1% Glass	5% Ca Carbonate 92% Non-fibrous (Other)	None Detected
2-H-BBM-01-Mastic *412000831-0017* *No baseboard present*	Entire 2nd Floor - Black Baseboard & Beige Mastic	Brown/Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-H-BBM-02-Mastic *412000831-0018* *No baseboard present*	Entire 2nd Floor - Black Baseboard & Beige Mastic	Brown Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
2-H-CM-01 *412000831-0020*	Hallway outside of 1st Wing - Orange Mastic under Blue Carpet	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-H-CM-02 *412000831-0021*	Hallway outside of 1st Wing - Orange Mastic under Blue Carpet	Tan Non-Fibrous Homogeneous	1% Cellulose	5% Ca Carbonate 94% Non-fibrous (Other)	None Detected
2-H-WG-01 *412000831-0023*	Windows - 2nd Floor - Beige Window Glazing	Tan/White Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
2-H-WG-02 *412000831-0024*	Windows - 2nd Floor - Beige Window Glazing	Tan/White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
2-H-WC-01 *412000831-0026*	Windows - 2nd Floor - White Window Glazing	Tan/White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
2-H-WC-02 *412000831-0027*	Windows - 2nd Floor - White Window Glazing	Gray/White Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
2-2-CM-01 *412000831-0029*	2nd Floor - 2nd Wing - Orange Carpet Mastic	Brown/Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-2-CM-02 *412000831-0030*	2nd Floor - 2nd Wing - Orange Carpet Mastic	Gray/Tan Non-Fibrous Homogeneous	1% Cellulose	10% Ca Carbonate 89% Non-fibrous (Other)	None Detected
2-2-CT-01 *412000831-0032*	2nd Floor - 2nd Wing - White Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 15% Min. Wool	20% Perlite 5% Non-fibrous (Other)	None Detected
2-2-DWJC-01-Drywall *412000831-0033*	2nd Floor - 2nd Wing - Drywall & Joint Compound	Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
2-2-DWJC-01-Joint Compound *412000831-0033A*	2nd Floor - 2nd Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-2-DWJC-02-Drywall *412000831-0034*	2nd Floor - 2nd Wing - Drywall & Joint Compound	Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected

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http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-2-DWJC-02-Joint Compound *412000831-0034A*	2nd Floor - 2nd Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-2-DWJC-03-Drywall *412000831-0035*	2nd Floor - 2nd Wing - Drywall & Joint Compound	Brown/Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
2-2-DWJC-03-Joint Compound *412000831-0035A*	2nd Floor - 2nd Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-3-DWJC-01-Drywall *412000831-0036*	2nd Floor - 3rd Wing - Drywall & Joint Compound	Gray Non-Fibrous Homogeneous	6% Cellulose	94% Non-fibrous (Other)	None Detected
2-3-DWJC-01-Joint Compound *412000831-0036A*	2nd Floor - 3rd Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-3-DWJC-02-Drywall *412000831-0037*	2nd Floor - 3rd Wing - Drywall & Joint Compound	Gray Non-Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
2-3-DWJC-02-Joint Compound *412000831-0037A*	2nd Floor - 3rd Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-3-DWJC-03-Drywall *412000831-0038*	2nd Floor - 3rd Wing - Drywall & Joint Compound	Brown/Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
2-3-DWJC-03-Joint Compound *412000831-0038A*	2nd Floor - 3rd Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-3-CT-01 *412000831-0039*	2nd Floor - 3rd Wing - Ceiling Tile	Gray/White Fibrous Heterogeneous	60% Cellulose 10% Min. Wool	15% Perlite 15% Non-fibrous (Other)	None Detected
2-3-CM-01 *412000831-0040*	2nd Floor - 3rd Wing - Orange Carpet Mastic	Gray/Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	<1% Chrysotile
2-3-CM-02 *412000831-0041*	2nd Floor - 3rd Wing - Orange Carpet Mastic	Tan Non-Fibrous Homogeneous	1% Cellulose	5% Ca Carbonate 94% Non-fibrous (Other)	<1% Chrysotile
2-3-FT-01-Top Mastic *412000831-0043*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic	Gray/Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2-3-FT-01-Floor Tile *412000831-0043A*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic	Gray Non-Fibrous Homogeneous		12% Ca Carbonate 80% Non-fibrous (Other)	8% Chrysotile
2-3-FT-01-Bottom Mastic *412000831-0043B* *Possible contamination*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
2-3-FT-02-Top Mastic *412000831-0044*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic	Tan Non-Fibrous Homogeneous	1% Cellulose	5% Ca Carbonate 94% Non-fibrous (Other)	None Detected
2-3-FT-02-Floor Tile *412000831-0044A*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic	Gray Non-Fibrous Homogeneous		90% Non-fibrous (Other)	10% Chrysotile

Initial report from: 01/29/2020 10:23:01

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http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-3-FT-02-Bottom Mastic *412000831-0044B*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
2-4-CM-01 *412000831-0046* *Result includes a small amount of inseparable attached material*	2nd Floor - 4th Wing - Carpet Mastic	Brown/Gray/Tan Non-Fibrous Homogeneous	<1% Cellulose	5% Ca Carbonate 95% Non-fibrous (Other)	<1% Chrysotile
2-4-CM-02 *412000831-0047*	2nd Floor - 4th Wing - Carpet Mastic	Brown/Tan Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
2-4-PT-01 *412000831-0049*	2nd Floor - 4th Wing - Pipe Tape	Tan/White/Silver Non-Fibrous Homogeneous	15% Cellulose 5% Glass	80% Non-fibrous (Other)	None Detected
2-4-PT-02 *412000831-0050*	2nd Floor - 4th Wing - Pipe Tape	Tan/White/Silver Non-Fibrous Homogeneous	15% Cellulose 5% Glass	80% Non-fibrous (Other)	None Detected
2-4-PT-03 *412000831-0051*	2nd Floor - 4th Wing - Pipe Tape	Gray/White/Silver Fibrous Homogeneous	10% Cellulose 5% Glass	15% Ca Carbonate 70% Non-fibrous (Other)	None Detected
2-4-CT-01 *412000831-0052*	2nd Floor - 4th Wing - Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 15% Min. Wool	20% Perlite 5% Non-fibrous (Other)	None Detected
2-5-CM-01 *412000831-0053*	2nd Floor - 5th Wing - Orange Carpet Mastic	Tan Non-Fibrous Homogeneous	<1% Cellulose	5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-5-CM-02 *412000831-0054*	2nd Floor - 5th Wing - Orange Carpet Mastic	Brown/Tan Non-Fibrous Homogeneous	1% Cellulose 1% Synthetic	10% Ca Carbonate 88% Non-fibrous (Other)	None Detected
2-5-WC-01 *412000831-0056*	2nd Floor - 5th Wing - Brown Wall Caulking	Brown Non-Fibrous Homogeneous	<1% Fibrous (Other)	100% Non-fibrous (Other)	None Detected
2-5-WC-02 *412000831-0057*	2nd Floor - 5th Wing - Brown Wall Caulking	Brown Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
2-5-DWJC-01-Drywall *412000831-0059*	2nd Floor - 5th Wing - Drywall & Joint Compound	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
2-5-DWJC-01-Joint Compound *412000831-0059A*	2nd Floor - 5th Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-5-DWJC-02-Drywall *412000831-0060*	2nd Floor - 5th Wing - Drywall & Joint Compound	Gray Fibrous Heterogeneous	5% Cellulose 1% Glass	94% Non-fibrous (Other)	None Detected
2-5-DWJC-02-Joint Compound *412000831-0060A*	2nd Floor - 5th Wing - Drywall & Joint Compound	White/Rust Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-5-DWJC-03-Drywall *412000831-0061*	2nd Floor - 5th Wing - Drywall & Joint Compound	Gray Fibrous Homogeneous	5% Cellulose	95% Non-fibrous (Other)	None Detected
2-5-DWJC-03-Joint Compound *412000831-0061A*	2nd Floor - 5th Wing - Drywall & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected

Initial report from: 01/29/2020 10:23:01

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1-FT1-01-Floor Tile *412000831-0062*	1st Floor - H, 2, 3 - 12" Tan Tile	Brown Non-Fibrous Homogeneous		20% Ca Carbonate 78% Non-fibrous (Other)	2% Chrysotile
1-FT1-01-Mastic *412000831-0062A*	1st Floor - H, 2, 3 - 12" Tan Tile	Black Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
1-FT1-02-Floor Tile *412000831-0063*	1st Floor - H, 2, 3 - 12" Tan Tile	Tan Non-Fibrous Homogeneous		30% Ca Carbonate 66% Non-fibrous (Other)	4% Chrysotile
1-FT1-02-Mastic *412000831-0063A*	1st Floor - H, 2, 3 - 12" Tan Tile	Black Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
1-FT2-01-Floor Tile *412000831-0065*	1st Floor - 9" Green Tile	Green Non-Fibrous Homogeneous		20% Ca Carbonate 77% Non-fibrous (Other)	3% Chrysotile
1-FT2-01-Mastic *412000831-0065A*	1st Floor - 9" Green Tile	Black Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
1-FT2-02-Floor Tile *412000831-0066*	1st Floor - 9" Green Tile	Green Non-Fibrous Homogeneous		30% Ca Carbonate 66% Non-fibrous (Other)	4% Chrysotile
1-FT2-02-Mastic *412000831-0066A*	1st Floor - 9" Green Tile	Black Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	None Detected
1-AT-01 *412000831-0068*	1st Floor - Acoustic Tile	Gray Non-Fibrous Homogeneous	70% Min. Wool	5% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1-AT-02 *412000831-0069*	1st Floor - Acoustic Tile	Gray/White Non-Fibrous Homogeneous	70% Min. Wool	5% Ca Carbonate 25% Non-fibrous (Other)	None Detected
1-AT-03 *412000831-0070*	1st Floor - Acoustic Tile	Gray/White Fibrous Homogeneous	75% Min. Wool	25% Non-fibrous (Other)	None Detected
1-WB-01-Drywall *412000831-0071*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	Gray Fibrous Homogeneous	5% Cellulose 1% Glass	94% Non-fibrous (Other)	None Detected
1-WB-01-Joint Compound *412000831-0071A*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White/Rust Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1-WB-02-Drywall *412000831-0072*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	Gray Fibrous Homogeneous	4% Cellulose 1% Glass	95% Non-fibrous (Other)	None Detected
1-WB-02-Joint Compound *412000831-0072A*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White/Rust Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1-WB-03-Drywall *412000831-0073*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	Gray Fibrous Heterogeneous	3% Cellulose 1% Glass	96% Non-fibrous (Other)	None Detected
1-WB-03-Joint Compound *412000831-0073A*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White/Rust Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected

Initial report from: 01/29/2020 10:23:01

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EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
1-WB-04-Drywall *412000831-0074*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	Gray Fibrous Homogeneous	5% Cellulose 1% Glass	94% Non-fibrous (Other)	None Detected
1-WB-04-Joint Compound *412000831-0074A*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1-WB-05-Drywall *412000831-0075*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	Gray Fibrous Heterogeneous	5% Cellulose 1% Glass	94% Non-fibrous (Other)	None Detected
1-WB-05-Joint Compound *412000831-0075A*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1-WB-06-Drywall *412000831-0076*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	Gray Fibrous Heterogeneous	5% Cellulose 1% Glass	94% Non-fibrous (Other)	None Detected
1-WB-06-Joint Compound *412000831-0076A*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1-WB-07-Drywall *412000831-0077*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	Brown/Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
1-WB-07-Joint Compound *412000831-0077A*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	Tan Non-Fibrous Homogeneous		40% Ca Carbonate 58% Non-fibrous (Other)	2% Chrysotile
1-WB-08-Joint Compound *412000831-0078* *No drywall present*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1-WB-09-Joint Compound *412000831-0079* *No drywall present*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1-WB-10-Joint Compound *412000831-0080* *No drywall present*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
1-WB-11-Joint Compound *412000831-0081* *No drywall present*	1st Floor - 4, 4, 4, 3, 3, 2, 2, 2, 1 - Wallboard & Joint Compound	White Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
RF-01 *412000831-0082*	Roof - Roof & Felt	Black Non-Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
RF-02 *412000831-0083*	Roof - Roof & Felt	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected

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EMSL Order:	412000831
Customer ID:	WPCE62
Customer PO:	EN197470
Project ID:	

Analyst(s)

Eric Loomis (56)
Katherine Sluder (40)

Lee Plumley, Laboratory Manager
or Other Approved Signatory

Initial report from: 01/29/2020 10:23:01

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Attention: Andrew Mitroka
Terracon, Inc.
1450 Fifth Street West
North Charleston, SC 29405

Project: EN197470

Phone: (843) 884-1234
Fax: (843) 884-9234
Received Date: 01/27/2020 11:00 AM
Analysis Date: 01/28/2020
Collected Date: 01/23/2020

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
2-1-CM-03 *412000831-0007*	2nd Floor - 1st Wing - 12" Green Tile - Orange Mastic	Green Non-Fibrous Homogeneous	99.44 Other	None	0.56% Chrysotile
2-1-CM2-03-Mastic *412000831-0010*	2nd Floor - 1st Wing - Orange Carpet Mastic	Red Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-1-FTM-03 *412000831-0013*	2nd Floor - 1st Wing - Black Floor Tile Mastic	Black Non-Fibrous Homogeneous	99.32 Other	None	0.68% Chrysotile
2-H-SF-03-Flooring *412000831-0016*	Hallway - 2nd Floor - Tan Sheet Flooring & Orange Mastic				
Positive Stop (Not Analyzed)					
2-H-SF-03-Mastic *412000831-0016A*	Hallway - 2nd Floor - Tan Sheet Flooring & Orange Mastic	Brown Non-Fibrous Homogeneous	99.42 Other	None	0.58% Chrysotile
2-H-BBM-03-Mastic *412000831-0019*	Entire 2nd Floor - Black Baseboard & Beige Mastic	Tan Non-Fibrous Homogeneous	100.0 Other No baseboard present	None	No Asbestos Detected
2-H-CM-03 *412000831-0022*	Hallway outside of 1st Wing - Orange Mastic under Blue Carpet	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-H-WG-03 *412000831-0025*	Windows - 2nd Floor - Beige Window Glazing	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-H-WC-03 *412000831-0028*	Windows - 2nd Floor - White Window Glazing	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-2-CM-03 *412000831-0031*	2nd Floor - 2nd Wing - Orange Carpet Mastic	Brown Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-3-CM-03 *412000831-0042*	2nd Floor - 3rd Wing - Orange Carpet Mastic	Tan Non-Fibrous Homogeneous	99.42 Other	None	0.58% Chrysotile
2-3-FT-03-Top Mastic *412000831-0045*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic	Tan Non-Fibrous Homogeneous	100.0 Other	None	<0.69% Chrysotile

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 01/29/2020 10:22:56

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Attention: Andrew Mitroka
Terracon, Inc.
1450 Fifth Street West
North Charleston, SC 29405

Project: EN197470

Phone: (843) 884-1234
Fax: (843) 884-9234
Received Date: 01/27/2020 11:00 AM
Analysis Date: 01/28/2020
Collected Date: 01/23/2020

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
2-3-FT-03-Floor Tile *412000831-0045A*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic				
Positive Stop (Not Analyzed)					
2-3-FT-03-Bottom Mastic *412000831-0045B*	2nd Floor - 3rd Wing - Tan Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous	100.0 Other	None	<0.38% Chrysotile
2-4-CM-03 *412000831-0048*	2nd Floor - 4th Wing - Carpet Mastic	Tan Non-Fibrous Homogeneous	99.39 Other	None	0.61% Chrysotile
2-5-CM-03 *412000831-0055*	2nd Floor - 5th Wing - Orange Carpet Mastic	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-5-WC-03 *412000831-0058*	2nd Floor - 5th Wing - Brown Wall Caulking	Brown Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
1-FT1-03-Floor Tile *412000831-0064*	1st Floor - H, 2, 3 - 12" Tan Tile				
Positive Stop (Not Analyzed)					
1-FT1-03-Mastic *412000831-0064A*	1st Floor - H, 2, 3 - 12" Tan Tile				
Positive Stop (Not Analyzed)					
1-FT2-03-Floor Tile *412000831-0067*	1st Floor - 9" Green Tile				
Positive Stop (Not Analyzed)					
1-FT2-03-Mastic *412000831-0067A*	1st Floor - 9" Green Tile	Tan/Black Non-Fibrous Homogeneous	99.73 Other	None	0.27% Chrysotile
RF-03 *412000831-0084*	Roof - Roof & Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 01/29/2020 10:22:56

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000831
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Attention: Andrew Mitroka
Terracon, Inc.
1450 Fifth Street West
North Charleston, SC 29405

Project: EN197470

Phone: (843) 884-1234
Fax: (843) 884-9234
Received Date: 01/27/2020 11:00 AM
Analysis Date: 01/28/2020
Collected Date: 01/23/2020

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types

Analyst(s)

Derrick Young (17)

Lee Plumley, Laboratory Manager
or other approved signatory

This laboratory is not responsible for % asbestos in total sample when the residue only is submitted for analysis. The above report relates only to the items tested. This report may not be reproduced, except in full, without written approval by EMSL Analytical, Inc. Samples received in good condition unless otherwise noted. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 01/29/2020 10:22:56

OrderID: 412000831

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number (*Lab Use Only*): 412000831

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Company : Terracon	**EMSL-Bill to:** ☒ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*
Street: 1450 5th St. West	
City: North Charleston **State/Province:** SC	**Zip/Postal Code:** **Country:**
Report To (Name): Andrew Mitroka	**Telephone #:**
Email Address: Andrew.Mitroka@terracon.com	**Fax #:** **Purchase Order:**
Project Name/Number: EN197470	**Please Provide Results:** ☐ Fax ☐ Email
U.S. State Samples Taken: SC	**CT Samples:** ☐ Commercial/Taxable ☐ Residential/Tax Exempt

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hour ☐ 6 Hour ☐ 24 Hour ☒ 48 Hour ☐ 72 Hour ☐ 96 Hour ☐ 1 Week ☐ 2 Week

**For TEM Air 3 hr through 6 hr, please call ahead to schedule.*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.*

PLM - Bulk (reporting limit)	TEM – Bulk
☒ PLM EPA 600/R-93/116 (<1%)	☒ TEM EPA NOB – EPA 600/R-93/116 Section 2.5.5.1
☐ PLM EPA NOB (<1%)	☐ NY ELAP Method 198.4 (TEM)
Point Count ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ Chatfield Protocol (semi-quantitative)
Point Count w/Gravimetric ☐ 400 (<0.25%) ☐ 1000 (<0.1%)	☐ TEM % by Mass – EPA 600/R-93/116 Section 2.5.5.2
☐ NIOSH 9002 (<1%)	☐ TEM Qualitative via Filtration Prep Technique
☐ NY ELAP Method 198.1 (friable in NY)	☐ TEM Qualitative via Drop Mount Prep Technique
☐ NY ELAP Method 198.6 NOB (non-friable-NY)	**Other**
☐ OSHA ID-191 Modified	☐
☐ Standard Addition Method	

☐ **Check For Positive Stop – Clearly Identify Homogenous Group** **Date Sampled:** 1-23-20

Samplers Name: Andrew Mitroka **Samplers Signature:**

Sample #	HA #	Sample Location	Material Description
2-1-DWJC-01/03	1	2nd Floor - 1st Wing	Dry wall & Joint Compound
2-1-CT-01	2	2nd Floor - 1st Wing	Ceiling tile
2-1-CM-01/03	3	2nd Floor - 1st Wing	12" Green tile - orange mastic *TEM NOB
2-1-CM2-01/03	4	2nd Floor - 1st Wing	Orange carpet mastic *TEM NOB
2-1-FTM-01/03	5	2nd Floor - 1st Wing	Black Floor tile mastic *TEM NOB
2-H-SF 01/03	6	Hallway - 2nd Floor	Tan sheet flooring & orange mastic *TEM NOB
2-H-BBM-01/03	7	Entire 2nd Floor	Black base board & beige mastic *TEM NOB
2-H-CM-01/03	8	Hallway outside of 1st Wing	Orange mastic under blue carpet *TEM NOB
2-H-WG 01/03	9	Windows - 2nd Floor	beige window glazing *TEM NOB
2-H-WC 01/03	10	~~White~~ Windows - 2nd Floor	white window glazing *TEM NOB

Client Sample # (s): - **Total # of Samples:**

Relinquished (Client): Terracon **Date:** 1-24-20 **Time:** 12:00

Received (Lab): [signature] **Date:** 1/27/20 **Time:** 11AM F/X GROUND

Comments/Special Instructions:

* TEM NOB RUN CONCURRENTLY

OrderID: 412000831

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Asbestos Bulk Building Material Chain of Custody

EMSL Order Number *(Lab Use Only)*: 412000831

EMSL ANALYTICAL, INC.
200 ROUTE 130 NORTH
CINNAMINSON, NJ 08077
PHONE: (800) 220-3675
FAX: (856) 786-5974

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	HA #	Sample Location	Material Description
2-2-CM-01/03	11	2nd Floor - 2nd Wing	Orange carpet mastic * TEM NOB
2-2-CT-01	12	2nd Floor - 2nd Wing	White ceiling tile
2-2-DWJC-01/03	13	2nd Floor - 2nd Wing	Drywall & Joint Compound
2-3-DWJC 01/03	14	2nd Floor - 3rd Wing	Drywall & Joint Compound
2-3-CT-01	15	2nd Floor - 3rd Wing	Ceiling tile
2-3-CM-01/03	16	2nd Floor - 3rd Wing	Orange carpet mastic * TEM NOB
2-3-FT-01/03	17	2nd Floor - 3rd Wing	Tan Floor tile with Black Mastic * TEM NOB
2-4-CM-01/03	18	2nd Floor - 4th Wing	Carpet Mastic * TEM NOB
2-4-PT-01/03	19	2nd Floor - 4th Wing	Pipe tape
2-4-CT-01	20	2nd Floor - 4th Wing	Ceiling tile
2-5-CM-01/03	21	2nd Floor - 5th Wing	Orange Carpet Mastic * TEM NOB
2-5-WC-01/03	22	2nd Floor - 5th Wing	brown wall caulking * TEM NOB
2-5-DWJC-01/03	23	2nd Floor - 5th Wing	Drywall & Joint compound
1-FT1-01/03	24	1st Floor (H, 2, 3)	12" tan tile
1-FT2-01/03	25	1st Floor	9" green tile
1-AT-01/03	26	1st Floor	Acoustic tile
1-WB-01/11	27	1st Floor (4, 4, 4, 3, 3, 2, 2, 2, 1)	Wall board & Joint Compound
* RF-01/03	28	Roof	Roof & Felt

***Comments/Special Instructions:**

EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

http://www.EMSL.com / charlottelab@emsl.com

EMSL Order:	412000801
Customer ID:	WPCE62
Customer PO:	EN197470
Project ID:	

Attention:	Craig Langford	**Phone:**	(843) 442-6658
	Terracon, Inc.	**Fax:**	(843) 884-9234
	1450 Fifth Street West	**Received Date:**	01/27/2020 8:45 AM
	North Charleston, SC 29405	**Analysis Date:**	01/27/2020
		Collected Date:	01/24/2020
Project:	EN197470 Bldg. NH62		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
I-PI-01-Wrap *412000801-0001*	Main Bldg. - AF - Pipe Insulation	White Non-Fibrous Homogeneous	40% Glass	8% Ca Carbonate 52% Non-fibrous (Other)	None Detected
I-PI-01-Insulation *412000801-0001A*	Main Bldg. - AF - Pipe Insulation	White Non-Fibrous Homogeneous	15% Cellulose 2% Glass	8% Ca Carbonate 75% Non-fibrous (Other)	None Detected
I-PI-02-Wrap *412000801-0002*	Main Bldg. - Wing 2 - Pipe Insulation	White Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
I-PI-02-Insulation *412000801-0002A*	Main Bldg. - Wing 2 - Pipe Insulation	White Non-Fibrous Homogeneous		30% Quartz 8% Ca Carbonate 62% Non-fibrous (Other)	None Detected
I-PI-03-Wrap *412000801-0003*	Main Bldg. - Wing 3 - Pipe Insulation	White Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
I-PI-03-Insulation *412000801-0003A*	Main Bldg. - Wing 3 - Pipe Insulation	White Non-Fibrous Homogeneous	15% Cellulose	8% Ca Carbonate 77% Non-fibrous (Other)	None Detected
E-PE-01-Wrap *412000801-0004*	Ext. Boiler Room - Pipe Elbow	Gray/White Fibrous Heterogeneous	40% Glass	8% Ca Carbonate 52% Non-fibrous (Other)	None Detected
E-PE-01-Insulation *412000801-0004A*	Ext. Boiler Room - Pipe Elbow	Tan Non-Fibrous Homogeneous		98% Non-fibrous (Other)	2% Amosite <1% Chrysotile
E-PW-01 *412000801-0005*	Ext. Boiler Room - Pipe Wrap	White/Beige Fibrous Homogeneous	60% Cellulose	8% Ca Carbonate 32% Non-fibrous (Other)	None Detected
E-PW-02-Wrap *412000801-0006*	Ext. Boiler Room - Pipe Wrap	White Fibrous Homogeneous	60% Cellulose	8% Ca Carbonate 32% Non-fibrous (Other)	None Detected
E-PW-02-Insulation *412000801-0006A*	Ext. Boiler Room - Pipe Wrap	Yellow Fibrous Homogeneous	99% Glass	1% Non-fibrous (Other)	None Detected
E-PW-03 *412000801-0007*	Ext. Boiler Room - Pipe Wrap	Gray Fibrous Homogeneous	60% Cellulose 20% Glass	8% Ca Carbonate 12% Non-fibrous (Other)	None Detected
E-GI-01 *412000801-0008*	Ext. Boiler Room - Gasket (Door)	White/Rust Fibrous Homogeneous		40% Non-fibrous (Other)	60% Chrysotile
E-GI-02 *412000801-0009*	Ext. Boiler Room - Gasket (Door)	Tan/Rust Fibrous Homogeneous		40% Non-fibrous (Other)	60% Chrysotile
E-GI-03 *412000801-0010*	Ext. Boiler Room - Gasket (Door)	Red Fibrous Homogeneous		40% Non-fibrous (Other)	60% Chrysotile
E-DI-01 *412000801-0011*	Ext. Boiler Room - Door Insulation	Brown/Gray Non-Fibrous Homogeneous		30% Quartz 8% Ca Carbonate 62% Non-fibrous (Other)	None Detected

Initial report from: 01/28/2020 08:08:26

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412000801
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
E-DI-02 *412000801-0012*	Ext. Boiler Room - Door Insulation	Gray Non-Fibrous Homogeneous	5% Min. Wool	30% Quartz 8% Ca Carbonate 57% Non-fibrous (Other)	None Detected
E-DI-03 *412000801-0013*	Ext. Boiler Room - Door Insulation	Red Non-Fibrous Homogeneous	5% Min. Wool	30% Quartz 8% Ca Carbonate 57% Non-fibrous (Other)	None Detected
E-PI-01-Wrap *412000801-0014*	Ext. Boiler Room - Pipe Insulation	White/Blue Fibrous Heterogeneous	60% Glass	40% Non-fibrous (Other)	None Detected
E-PI-01-Gray Insulation *412000801-0014A*	Ext. Boiler Room - Pipe Insulation	Gray Non-Fibrous Homogeneous	15% Cellulose	8% Ca Carbonate 15% Mica 62% Non-fibrous (Other)	None Detected
E-PI-01-White Insulation *412000801-0014B*	Ext. Boiler Room - Pipe Insulation	White Non-Fibrous Homogeneous	10% Cellulose	8% Ca Carbonate 82% Non-fibrous (Other)	None Detected
E-PI-02-Wrap *412000801-0015*	Ext. Boiler Room - Pipe Insulation	White/Blue Fibrous Homogeneous	60% Glass	40% Non-fibrous (Other)	None Detected
E-PI-02-Insulation *412000801-0015A*	Ext. Boiler Room - Pipe Insulation	Gray Non-Fibrous Homogeneous	8% Cellulose	5% Ca Carbonate 15% Mica 72% Non-fibrous (Other)	None Detected
E-PI-03-Wrap *412000801-0016*	Ext. Boiler Room - Pipe Insulation	Red Fibrous Homogeneous	60% Glass	40% Non-fibrous (Other)	None Detected
E-PI-03-Insulation *412000801-0016A*	Ext. Boiler Room - Pipe Insulation	Gray Fibrous Homogeneous	5% Cellulose	8% Ca Carbonate 87% Non-fibrous (Other)	None Detected
E-BI-01 *412000801-0017*	Ext. Boiler Room - Boiler Insulation	Gray/White Non-Fibrous Homogeneous	2% Cellulose 98% Glass		None Detected
E-BI-02 *412000801-0018*	Ext. Boiler Room - Boiler Insulation	Gray/White Fibrous Homogeneous	99% Glass	1% Non-fibrous (Other)	None Detected
E-BI-03 *412000801-0019*	Ext. Boiler Room - Boiler Insulation	Gray Fibrous Homogeneous	99% Glass	1% Non-fibrous (Other)	None Detected
E-PW2-01 *412000801-0020*	Ext. Boiler Room 2 - Pipe Wrap	White/Beige Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
E-PW2-02 *412000801-0021*	Ext. Boiler Room 2 - Pipe Wrap	White/Beige Non-Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
E-PW2-03 *412000801-0022*	Ext. Boiler Room 2 - Pipe Wrap	Tan Fibrous Homogeneous	70% Cellulose	30% Non-fibrous (Other)	None Detected
E-BI2-01 *412000801-0023*	Ext. Boiler Room 2 - Boiler Insulation	Gray/Rust Non-Fibrous Homogeneous	95% Glass	5% Ca Carbonate	None Detected
E-BI2-02 *412000801-0024*	Ext. Boiler Room 2 - Boiler Insulation	White/Rust Non-Fibrous Homogeneous	95% Glass	5% Ca Carbonate	None Detected
E-BI2-03 *412000801-0025*	Ext. Boiler Room 2 - Boiler Insulation	Gray Fibrous Homogeneous	99% Glass	1% Non-fibrous (Other)	None Detected

Initial report from: 01/28/2020 08:08:26

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10801 Southern Loop Blvd Pineville, NC 28134
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EMSL Order: 412000801
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
E-GM2-01 *412000801-0026*	Ext. Boiler Room 2 - Gasket	White Fibrous Homogeneous	85% Glass	15% Non-fibrous (Other)	None Detected
E-GM2-02 *412000801-0027*	Ext. Boiler Room 2 - Gasket	White Non-Fibrous Homogeneous	80% Glass	20% Non-fibrous (Other)	None Detected
E-GM2-03 *412000801-0028*	Ext. Boiler Room 2 - Gasket	Gray Fibrous Homogeneous	99% Glass	1% Non-fibrous (Other)	None Detected
E-PI2-01 *412000801-0029*	Ext. Boiler Room 2 - Outside Pipe Insulation	White Fibrous Homogeneous	20% Cellulose	80% Non-fibrous (Other)	None Detected
E-PI2-02 *412000801-0030*	Ext. Boiler Room 2 - Outside Pipe Insulation	White Fibrous Homogeneous	15% Cellulose 1% Glass	84% Non-fibrous (Other)	None Detected
E-PI2-03 *412000801-0031*	Ext. Boiler Room 2 - Outside Pipe Insulation	Tan Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
FD-01 *412000801-0032*	2nd Floor Main - Fire Door	White Non-Fibrous Homogeneous	8% Min. Wool	30% Perlite 62% Non-fibrous (Other)	None Detected
FD-02 *412000801-0033*	2nd Floor Main - Fire Door	Gray/White Non-Fibrous Homogeneous		5% Ca Carbonate 30% Perlite 65% Non-fibrous (Other)	None Detected
FD-03 *412000801-0034*	2nd Floor Main - Fire Door	Gray Non-Fibrous Homogeneous		5% Ca Carbonate 30% Perlite 65% Non-fibrous (Other)	None Detected

Analyst(s)
Eric Loomis (30)
James Kincheloe (13)

Lee Plumley, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from: 01/28/2020 08:08:26

OrderID: 412000801

EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 412000801

EMSL ANALYTICAL, INC.
376 CROMPTON STREET
CHARLOTTE, NC 28273
PHONE: 704-525-2205
FAX: 704-525-2382

Company : Terracon		**EMSL-Bill to:** ☒ Same ☐ Different If Bill to is Different note instructions in Comments**	
Street: 1450 Fifth STreet West		*Third Party Billing requires written authorization from third party*	
City: North Charleston	**State/Province: SC**	**Zip/Postal Code:**	**Country:**
Report To (Name): Craig Langford		**Fax #:**	
Telephone #: 843.442.6658		**Email Address:**	
Project Name/Number: EN 197470 Bldg #NH62			
Please Provide Results: ☐ Fax ☐ Email	**Purchase Order:**	**U.S. State Samples Taken:**	

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hours ☐ 6 Hours ☒ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☐ 5 Days ☐ 10 Days

**For TEM Air 3 hours/6 hours, please call ahead to schedule.*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.*

PCM - Air
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ☐ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable in NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NIOSH 9002 (<1%)

TEM - Air
- ☐ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ Chatfield SOP
- ☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
- ☐ PLM CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ EPA Protocol (Semi-Quantitative)
- ☐ EPA Protocol (Quantitative)

Other:
- ☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group**

Samplers Name: Craig Langford **Samplers Signature:** Craig Langford

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
1-PI-01	Main Bldg - Pipe Insulation AF		1/24/20
1-PI-02	" " Wing 2		
1-PI-03	" " Wing 3		
E-PE-01	Ext. Boiler Rm Pipe Elbow		
E-PW-01/03	" " Pipe Wrap		
E-GI-01/03	" " Gasket (Door)		
E-DI-01/03	" " Door Insulation		
E-PI-01/03	" " Pipe Insulation		

Client Sample # (s): - **Total # of Samples:** 34

Relinquished (Client): Craig Langford **Date:** 1/24/20 **Time:** 1630

Received (Lab): Kyle Smith **Date:** 1/27/20 **Time:** 8:45AM F/x

Comments/Special Instructions:

7958 1748 3839

OrderID: 412000801

EMSL ANALYTICAL, INC.
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Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 412000630861

EMSL ANALYTICAL, INC.
376 CROMPTON STREET
CHARLOTTE, NC 28273
PHONE: 704-525-2205
FAX: 704-525-2382

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
E-BI-01/03	Ext Boiler Room Boiler Insulation		
E-PW2-01/03	Ext Boiler Room 2 - Pipe w/ RAD		
E-BI2-01/03	" " Boiler Ins		
E-GM2-01/03	" " Gasket		
E-PI2-01/03	" " outside Pipe Insulation		
FD 01/03	Fire Door 2nd Floor Main		

***Comments/Special Instructions:**

Page _____ of _____ pages

EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

http://www.EMSL.com / charlottelab@emsl.com

EMSL Order:	412000754
Customer ID:	WPCE62
Customer PO:	EN197470
Project ID:	

Attention:	Craig Langford	**Phone:**	(843) 442-6658
	Terracon, Inc.	**Fax:**	(843) 884-9234
	1450 Fifth Street West	**Received Date:**	01/24/2020 9:15 AM
	North Charleston, SC 29405	**Analysis Date:**	01/24/2020
		Collected Date:	
Project:	EN197470 Bldg. NH62		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
PI-01 *412000754-0001*	Hall - Pipe Insulation	White Fibrous Homogeneous		55% Ca Carbonate 8% Non-fibrous (Other)	2% Amosite 35% Chrysotile
PI-02 *412000754-0002*	Hall - Pipe Insulation	White Fibrous Homogeneous		62% Non-fibrous (Other)	8% Amosite 30% Chrysotile
PI-03-Insulation *412000754-0003*	Wing 1 - Pipe Insulation	Gray Non-Fibrous Homogeneous		60% Non-fibrous (Other)	5% Amosite 35% Chrysotile
PI-03-Wrap *412000754-0003A*	Wing 1 - Pipe Insulation	Green Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
D-01 *412000754-0004*	Hall at Mech - Pipe Debris	White Fibrous Homogeneous		70% Non-fibrous (Other)	20% Amosite 10% Chrysotile
D-02 *412000754-0005*	Hall Wing 4 - Pipe Debris	White Fibrous Homogeneous		70% Non-fibrous (Other)	20% Amosite 10% Chrysotile
D-03 *412000754-0006*	Hall Wing 4 - Pipe Debris	White Fibrous Homogeneous		70% Non-fibrous (Other)	20% Amosite 10% Chrysotile
D-04 *412000754-0007*	Hall Wing 3 - Pipe Debris	White Fibrous Homogeneous		65% Non-fibrous (Other)	25% Amosite 10% Chrysotile
D-05 *412000754-0008*	Hall Wing 3 - Pipe Debris	White Fibrous Homogeneous		65% Non-fibrous (Other)	20% Amosite 15% Chrysotile
D-06 *412000754-0009*	Hall Wing 2 - Pipe Debris	Tan Fibrous Homogeneous		70% Non-fibrous (Other)	20% Amosite 10% Chrysotile

Analyst(s)

Anupriya Tyagi (6)

Lacy Searcy (4)

Lee Plumley, Laboratory Manager
or Other Approved Signatory

Initial report from: 01/24/2020 11:45:24

OrderID: 412000754

Asbestos Chain of Custody

EMSL Order Number *(Lab Use Only)*: 412000754

EMSL ANALYTICAL, INC.
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EMSL ANALYTICAL, INC.
706 GRALIN STREET
KERNERSVILLE, NC 27284
PHONE: 336-992-1025
FAX: 336-992-4175

Company : Terracon		**EMSL-Bill to:** ☐ Same ☐ Different If Bill to is Different note instructions in Comments** *Third Party Billing requires written authorization from third party*	
Street: 1450 Fifth Street W			
City: North Charleston	**State/Province: SC**	**Zip/Postal Code: 29405**	**Country: US**
Report To (Name): Craig Langford		**Fax #:**	
Telephone #: 843-442-6658		**Email Address: craig.langford@terracon.com**	
Project Name/Number: EN197470 Bldg NH62			
Please Provide Results: ☐ Fax ☒ Email	**Purchase Order:**	**U.S. State Samples Taken: SC**	

Turnaround Time (TAT) Options* – Please Check

☐ 3 Hours ☒ 6 Hours ☐ 24 Hrs ☐ 48 Hrs ☐ 3 Days ☐ 4 Days ☐ 5 Days ☐ 10 Days

**For TEM Air 3 hours/6 hours, please call ahead to schedule.*There is a premium charge for 3 Hour TEM AHERA or EPA Level II TAT. You will be asked to sign an authorization form for this service. Analysis completed in accordance with EMSL's Terms and Conditions located in the Analytical Price Guide.*

PCM - Air
- ☐ NIOSH 7400
- ☐ w/ OSHA 8hr. TWA

PLM - Bulk (reporting limit)
- ☒ PLM EPA 600/R-93/116 (<1%)
- ☐ PLM EPA NOB (<1%)

Point Count
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)

Point Count w/Gravimetric
- ☐ 400 (<0.25%) ☐ 1000 (<0.1%)
- ☐ NYS 198.1 (friable in NY)
- ☐ NYS 198.6 NOB (non-friable-NY)
- ☐ NIOSH 9002 (<1%)

TEM - Air
- ☐ AHERA 40 CFR, Part 763
- ☐ NIOSH 7402
- ☐ EPA Level II
- ☐ ISO 10312

TEM - Bulk
- ☐ TEM EPA NOB
- ☐ NYS NOB 198.4 (non-friable-NY)
- ☐ Chatfield SOP
- ☐ TEM Mass Analysis-EPA 600 sec. 2.5

TEM – Water: EPA 100.2
- Fibers >10µm ☐ Waste ☐ Drinking
- All Fiber Sizes ☐ Waste ☐ Drinking

TEM- Dust
- ☐ Microvac - ASTM D 5755
- ☐ Wipe - ASTM D6480
- ☐ Carpet Sonication (EPA 600/J-93/167)

Soil/Rock/Vermiculite
- ☐ PLM CARB 435 - A (0.25% sensitivity)
- ☐ PLM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - B (0.1% sensitivity)
- ☐ TEM CARB 435 - C (0.01% sensitivity)
- ☐ EPA Protocol (Semi-Quantitative)
- ☐ EPA Protocol (Quantitative)

Other:
- ☐

☐ **Check For Positive Stop – Clearly Identify Homogenous Group**

Samplers Name: **Samplers Signature:**

Sample #	Sample Description	Volume/Area (Air) HA # (Bulk)	Date/Time Sampled
PI-01	Pipe Insulation 10" white Hall		
02	6" white Hall		
03	4" Green Wing 1		
D-01	Pipe Debris Hall e·mech		
02	Hall Wing 4		
03	Hall Wing 4		
04	Hall Wing 3		
05	Hall Wing 3		
06	Hall Wing 2		

Client Sample # (s): - **Total # of Samples:** 9

Relinquished (Client): [signature] **Date:** 1/23/20 **Time:** 1605

Received (Lab): [signature] **Date:** 1/24/20 **Time:** 9:15AM FK

Comments/Special Instructions:

7958 1748 3850

EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

http://www.EMSL.com / charlottelab@emsl.com

EMSL Order:	412001233
Customer ID:	WPCE62
Customer PO:	EN197470
Project ID:	

Attention:	Andrew Mitroka	**Phone:**	(843) 884-1234
	Terracon, Inc.	**Fax:**	(843) 884-9234
	1450 Fifth Street West	**Received Date:**	02/07/2020 10:00 AM
	North Charleston, SC 29405	**Analysis Date:**	02/07/2020
		Collected Date:	01/24/2020
Project:	EN197470		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-1-CM-01 *412001233-0001*	2nd Floor - Green Carpet Mastic	Green Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected

Analyst(s)

Eric Loomis (1)

Lee Plumley, Laboratory Manager
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method"), but augmented with procedures outlined in the 1993 ("final") version of the method. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. Interpretation and use of test results are the responsibility of the client. All samples received in acceptable condition unless otherwise noted. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. EMSL recommends gravimetric reduction for all non-friable organically bound materials prior to analysis. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC NVLAP Lab Code 200841-0, VA 3333 00312

Initial report from: 02/07/2020 11:16:06

EMSL Analytical, Inc.

10801 Southern Loop Blvd Pineville, NC 28134

Tel/Fax: (704) 525-2205 / (704) 525-2382

http://www.EMSL.com / charlottelab@emsl.com

EMSL Order:	412001643
Customer ID:	WPCE62
Customer PO:	EN197470
Project ID:	

Attention:	Andrew Mitroka	**Phone:**	(843) 884-1234
	Terracon, Inc.	**Fax:**	(843) 884-9234
	1450 Fifth Street West	**Received Date:**	02/19/2020 9:00 AM
	North Charleston, SC 29405	**Analysis Date:**	02/19/2020
		Collected Date:	02/18/2020
Project:	EN197470		

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-E-PI-01 *412001643-0001*	2nd Floor Entrance - White Pipe Insulation	White Non-Fibrous Homogeneous		86% Non-fibrous (Other)	10% Amosite 4% Chrysotile
2-E-PI-02 *412001643-0002*	2nd Floor Entrance - White Pipe Insulation	White/Beige Non-Fibrous Homogeneous		86% Non-fibrous (Other)	10% Amosite 4% Chrysotile
2-E-PI-03 *412001643-0003*	2nd Floor Entrance - White Pipe Insulation	White Fibrous Homogeneous		88% Non-fibrous (Other)	8% Amosite 4% Chrysotile
2-2-FT-01-Top Mastic *412001643-0004*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-2-FT-01-Floor Tile *412001643-0004A*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic	Brown Non-Fibrous Homogeneous		20% Ca Carbonate 74% Non-fibrous (Other)	6% Chrysotile
2-2-FT-01-Bottom Mastic *412001643-0004B*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		94% Non-fibrous (Other)	6% Chrysotile
2-2-FT-02-Top Mastic *412001643-0005*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
2-2-FT-02-Floor Tile *412001643-0005A*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic	Brown Non-Fibrous Homogeneous		30% Ca Carbonate 65% Non-fibrous (Other)	5% Chrysotile
2-2-FT-02-Bottom Mastic *412001643-0005B*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		96% Non-fibrous (Other)	4% Chrysotile
2-4-FT-01-Top Mastic *412001643-0007*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-4-FT-01-Floor Tile *412001643-0007A*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	White/Black Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
2-4-FT-01-Bottom Mastic *412001643-0007B*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
2-4-FT-02-Top Mastic *412001643-0008*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	Tan Non-Fibrous Homogeneous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-4-FT-02-Floor Tile *412001643-0008A*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	Black Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
2-4-FT-02-Bottom Mastic *412001643-0008B*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected

Initial report from: 02/19/2020 15:11:49

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412001643
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-1-FT-01 *412001643-0010*	2nd Floor-1st Wing - Beige Floor Tile	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 62% Non-fibrous (Other)	8% Chrysotile
2-1-FT-02 *412001643-0011*	2nd Floor-1st Wing - Beige Floor Tile	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 62% Non-fibrous (Other)	8% Chrysotile
2-8-FT-01-Top Mastic *412001643-0013*	2nd Floor-8th Wing - Beige Floor with Black Mastic	Tan Non-Fibrous Homogeneous	1% Synthetic	5% Ca Carbonate 94% Non-fibrous (Other)	None Detected
2-8-FT-01-Floor Tile *412001643-0013A*	2nd Floor-8th Wing - Beige Floor with Black Mastic	Gray Non-Fibrous Homogeneous		10% Ca Carbonate 82% Non-fibrous (Other)	8% Chrysotile
2-8-FT-01-Bottom Mastic *412001643-0013B* *Possible contamination*	2nd Floor-8th Wing - Beige Floor with Black Mastic	Black Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	<1% Chrysotile
2-8-FT-02-Top Mastic *412001643-0014*	2nd Floor-8th Wing - Beige Floor with Black Mastic	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
2-8-FT-02-Floor Tile *412001643-0014A*	2nd Floor-8th Wing - Beige Floor with Black Mastic	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 62% Non-fibrous (Other)	8% Chrysotile
2-8-FT-02-Bottom Mastic *412001643-0014B* *Possible contamination*	2nd Floor-8th Wing - Beige Floor with Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
2-9-SF-01-Flooring *412001643-0016*	2nd Floor-9th Wing - Red-Orange Sheet Flooring with Beige Mastic	Gray/Red Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile
2-9-SF-01-Mastic *412001643-0016A*	2nd Floor-9th Wing - Red-Orange Sheet Flooring with Beige Mastic	Tan Non-Fibrous Homogeneous	<1% Cellulose	100% Non-fibrous (Other)	None Detected
2-9-SF-02-Flooring *412001643-0017*	2nd Floor-9th Wing - Red-Orange Sheet Flooring with Beige Mastic	Orange Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile
2-9-SF-02-Mastic *412001643-0017A* *Possible contamination*	2nd Floor-9th Wing - Red-Orange Sheet Flooring with Beige Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
2-EXT-TS-01-Transite *412001643-0019*	Exterior Wing Connector - White Transite Siding with Black Felt	Gray/Blue Fibrous Heterogeneous		85% Non-fibrous (Other)	15% Chrysotile <1% Crocidolite
2-EXT-TS-01-Felt *412001643-0019A*	Exterior Wing Connector - White Transite Siding with Black Felt	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
2-EXT-TS-02-Transite *412001643-0020*	Exterior Wing Connector - White Transite Siding with Black Felt	Gray/White Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile <1% Crocidolite

Initial report from: 02/19/2020 15:11:49

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412001643
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-EXT-TS-02-Felt *412001643-0020A*	Exterior Wing Connector - White Transite Siding with Black Felt	Black Fibrous Homogeneous	60% Cellulose	40% Non-fibrous (Other)	None Detected
2-EXT-TS-03-Transite *412001643-0021*	Exterior Wing Connector - White Transite Siding with Black Felt	Gray Fibrous Homogeneous		85% Non-fibrous (Other)	15% Chrysotile <1% Crocidolite
2-7-FT-01-Floor Tile *412001643-0022*	2nd Floor & 7th Wing (Entrance) - Red Floor Tile with Black and Yellow Mastic	Red/Pink Non-Fibrous Homogeneous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
2-7-FT-01-Mastic *412001643-0022A*	2nd Floor & 7th Wing (Entrance) - Red Floor Tile with Black and Yellow Mastic	Tan/Black Non-Fibrous Homogeneous		5% Ca Carbonate 93% Non-fibrous (Other)	2% Chrysotile
2-7-FT-02-Floor Tile *412001643-0023*	2nd Floor & 7th Wing (Entrance) - Red Floor Tile with Black and Yellow Mastic	Pink Non-Fibrous Homogeneous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
2-7-FT-02-Mastic *412001643-0023A*	2nd Floor & 7th Wing (Entrance) - Red Floor Tile with Black and Yellow Mastic	Tan/Black Non-Fibrous Homogeneous		97% Non-fibrous (Other)	3% Chrysotile
2-7-FT2-01-Floor Tile *412001643-0025*	2nd Floor & 7th Wing (End) - Gray Floor Tile with Black Mastic	Gray Non-Fibrous Homogeneous		20% Ca Carbonate 72% Non-fibrous (Other)	8% Chrysotile
2-7-FT2-01-Mastic *412001643-0025A* *Possible contamination*	2nd Floor & 7th Wing (End) - Gray Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous	1% Cellulose	99% Non-fibrous (Other)	<1% Chrysotile
2-7-FT2-02-Floor Tile *412001643-0026*	2nd Floor & 7th Wing (End) - Gray Floor Tile with Black Mastic	Gray Non-Fibrous Homogeneous		30% Ca Carbonate 62% Non-fibrous (Other)	8% Chrysotile
2-7-FT2-02-Mastic *412001643-0026A* *Possible contamination*	2nd Floor & 7th Wing (End) - Gray Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	<1% Chrysotile
2-H-SC-01 *412001643-0028*	2nd Floor Hallway Walls - Plaster Skim Coat	Various/Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
2-H-SC-02 *412001643-0029*	2nd Floor Hallway Walls - Plaster Skim Coat	Various/Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
2-H-SC-03 *412001643-0030*	2nd Floor Hallway Walls - Plaster Skim Coat	Various/Beige Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
2-H-SC-04 *412001643-0031*	2nd Floor Hallway Walls - Plaster Skim Coat	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
2-H-SC-05 *412001643-0032*	3rd Floor Hallway Walls - Plaster Skim Coat	White Non-Fibrous Homogeneous		20% Ca Carbonate 80% Non-fibrous (Other)	None Detected
2-H-SC-06 *412001643-0033*	3rd Floor Hallway Walls - Plaster Skim Coat	White Non-Fibrous Homogeneous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected

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http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412001643
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

			Non-Asbestos		Asbestos
Sample	**Description**	**Appearance**	**% Fibrous**	**% Non-Fibrous**	**% Type**
2-H-SC-07 *412001643-0034*	3rd Floor Hallway Walls - Plaster Skim Coat	Various Non-Fibrous Homogeneous	<1% Cellulose	5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
2-H-PL-01 *412001643-0035*	2nd/3rd Floor Plaster - Plaster Skim Coat	White Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
2-H-PL-02 *412001643-0036*	2nd/3rd Floor Plaster - Plaster Skim Coat	Gray Non-Fibrous Homogeneous		20% Quartz 8% Ca Carbonate 72% Non-fibrous (Other)	None Detected
2-H-PL-03 *412001643-0037*	2nd/3rd Floor Plaster - Plaster Skim Coat	Gray Non-Fibrous Homogeneous		30% Quartz 8% Ca Carbonate 62% Non-fibrous (Other)	None Detected
2-H-PL-04 *412001643-0038*	2nd/3rd Floor Plaster - Plaster Skim Coat	Gray Non-Fibrous Homogeneous		30% Quartz 8% Ca Carbonate 62% Non-fibrous (Other)	None Detected
2-H-PL-05 *412001643-0039*	2nd/3rd Floor Plaster - Plaster Skim Coat	Gray Non-Fibrous Homogeneous		25% Quartz 10% Ca Carbonate 65% Non-fibrous (Other)	None Detected
2-H-PL-06 *412001643-0040*	2nd/3rd Floor Plaster - Plaster Skim Coat	Gray Non-Fibrous Homogeneous		30% Quartz 8% Ca Carbonate 62% Non-fibrous (Other)	None Detected
2-H-PL-07 *412001643-0041*	2nd/3rd Floor Plaster - Plaster Skim Coat	Gray Non-Fibrous Homogeneous		30% Quartz 8% Ca Carbonate 62% Non-fibrous (Other)	None Detected
2-H-PL-08 *412001643-0042*	2nd/3rd Floor Plaster - Plaster Skim Coat	Gray Non-Fibrous Homogeneous		30% Quartz 8% Ca Carbonate 62% Non-fibrous (Other)	None Detected
2-H-PL-09 *412001643-0043*	2nd/3rd Floor Plaster - Plaster Skim Coat	Gray Non-Fibrous Homogeneous		30% Quartz 10% Ca Carbonate 60% Non-fibrous (Other)	None Detected

Analyst(s)
Anupriya Tyagi (24)
Eric Loomis (32)

Lee Plumley, Laboratory Manager
or Other Approved Signatory

Initial report from: 02/19/2020 15:11:49

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412001643
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Attention: Andrew Mitroka
Terracon, Inc.
1450 Fifth Street West
North Charleston, SC 29405

Project: EN197470

Phone: (843) 884-1234
Fax: (843) 884-9234
Received Date: 02/19/2020 9:00 AM
Analysis Date: 02/19/2020
Collected Date: 02/18/2020

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
2-2-FT-03-Top Mastic *412001643-0006*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-2-FT-03-Floor Tile *412001643-0006A*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic				
Positive Stop (Not Analyzed)					
2-2-FT-03-Bottom Mastic *412001643-0006B*	2nd Floor-2nd Wing - Beige Floor Tile with Black Mastic				
Positive Stop (Not Analyzed)					
2-4-FT-03-Top Mastic *412001643-0009*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-4-FT-03-Floor Tile *412001643-0009A*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	White Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-4-FT-03-Bottom Mastic *412001643-0009B*	2nd Floor-4th Wing - Black-White Floor Tile with Mastic	Gray Non-Fibrous Homogeneous	99.50 Other	None	0.50% Chrysotile
2-1-FT-03 *412001643-0012*	2nd Floor-1st Wing - Beige Floor Tile				
Positive Stop (Not Analyzed)					
2-8-FT-03-Top Mastic *412001643-0015*	2nd Floor-8th Wing - Beige Floor with Black Mastic	Tan Non-Fibrous Homogeneous	99.41 Other	None	0.59% Chrysotile
2-8-FT-03-Floor Tile *412001643-0015A*	2nd Floor-8th Wing - Beige Floor with Black Mastic				
Positive Stop (Not Analyzed)					
2-8-FT-03-Bottom Mastic *412001643-0015B*	2nd Floor-8th Wing - Beige Floor with Black Mastic	Black Non-Fibrous Homogeneous	99.25 Other	None	0.75% Chrysotile
2-9-SF-03-Flooring *412001643-0018*	2nd Floor-9th Wing - Red-Orange Sheet Flooring with Beige Mastic				
Positive Stop (Not Analyzed)					

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 02/19/2020 19:43:59

EMSL Analytical, Inc.
10801 Southern Loop Blvd Pineville, NC 28134
Tel/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com / charlottelab@emsl.com

EMSL Order: 412001643
Customer ID: WPCE62
Customer PO: EN197470
Project ID:

Attention: Andrew Mitroka
Terracon, Inc.
1450 Fifth Street West
North Charleston, SC 29405

Project: EN197470

Phone: (843) 884-1234
Fax: (843) 884-9234
Received Date: 02/19/2020 9:00 AM
Analysis Date: 02/19/2020
Collected Date: 02/18/2020

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
2-9-SF-03-Mastic *412001643-0018A*	2nd Floor-9th Wing - Red-Orange Sheet Flooring with Beige Mastic	Tan Non-Fibrous Homogeneous	99.21 Other	None	0.79% Chrysotile
2-EXT-TS-03-Felt *412001643-0021A*	Exterior Wing Connector - White Transite Siding with Black Felt	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-7-FT-03-Floor Tile *412001643-0024A*	2nd Floor & 7th Wing (Entrance) - Red Floor Tile with Black and Yellow Mastic	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
2-7-FT-03-Mastic *412001643-0024B*	2nd Floor & 7th Wing (Entrance) - Red Floor Tile with Black and Yellow Mastic				
Positive Stop (Not Analyzed)					
2-7-FT2-03-Floor Tile *412001643-0027*	2nd Floor & 7th Wing (End) - Gray Floor Tile with Black Mastic				
Positive Stop (Not Analyzed)					
2-7-FT2-03-Mastic *412001643-0027A*	2nd Floor & 7th Wing (End) - Gray Floor Tile with Black Mastic	Black Non-Fibrous Homogeneous	99.56 Other	None	0.44% Chrysotile

Analyst(s)

Derrick Young (10)

Lee Plumley, Laboratory Manager
or other approved signatory

Samples analyzed by EMSL Analytical, Inc. Pineville, NC

Initial report from: 02/19/2020 19:43:59

EMSL Analytical, Inc.
10801 Southern Loop Blvd, Pineville, NC 28134
Phone/Fax: (704) 525-2205 / (704) 525-2382
http://www.EMSL.com charlottelab@emsl.com

EMSL Order:	412000780
CustomerID:	WPCE62
CustomerPO:	EN197470
ProjectID:	

Attn: **Craig Langford**
Terracon, Inc.
1450 Fifth Street West
North Charleston, SC 29405

Phone:	(843) 884-1234
Fax:	(843) 884-9234
Received:	01/27/20 8:45 AM
Collected:	1/24/2020

Project: **EN197470 Bldg. NH62**

Test Report: Lead in Paint Chips by Flame AAS (SW 846 3050B/7000B)*

Client Sample Description	*Lab ID*	*Collected*	*Analyzed*	*Weight*	*Lead Concentration*
Pb-01	*412000780-0001*	1/24/2020	1/27/2020	0.2438 g	1.0 % wt
	Site: Interior Wall 2nd Floor				
Pb-02	*412000780-0002*	1/24/2020	1/27/2020	0.2828 g	1.8 % wt
	Site: Interior Wall 2nd Floor				
Pb-03	*412000780-0003*	1/24/2020	1/27/2020	0.3118 g	1.0 % wt
	Site: Interior Wall 2nd Floor				
Pb-04	*412000780-0004*	1/24/2020	1/27/2020	0.2585 g	0.26 % wt
	Site: Door Frames 2nd Floor				
Pb-05	*412000780-0005*	1/24/2020	1/27/2020	0.2872 g	0.37 % wt
	Site: Door Frames 2nd Floor				
Pb-06	*412000780-0006*	1/24/2020	1/27/2020	0.2449 g	0.22 % wt
	Site: Door Frames 2nd Floor				
Pb-07	*412000780-0007*	1/24/2020	1/27/2020	0.2966 g	0.16 % wt
	Site: Windows 2nd Floor				
Pb-08	*412000780-0008*	1/24/2020	1/27/2020	0.3445 g	0.19 % wt
	Site: Windows 2nd Floor				
Pb-09	*412000780-0009*	1/24/2020	1/27/2020	0.3271 g	0.92 % wt
	Site: Windows 2nd Floor				
Pb-10	*412000780-0010*	1/24/2020	1/27/2020	0.3312 g	<0.0080 % wt
	Site: Stairwell Comp.				
Pb-11	*412000780-0011*	1/24/2020	1/27/2020	0.2787 g	12 % wt
	Site: Stairwell Comp.				
Pb-12	*412000780-0012*	1/24/2020	1/27/2020	0.2539 g	0.62 % wt
	Site: Stairwell Comp.				

Kyle N Collins

Kyle Collins, Technical Manager
or other approved signatory

*Analysis following Lead in Paint by EMSL SOP/Determination of Environmental Lead by FLAA. Reporting limit is 0.008 % wt based on the minimum sample weight per our SOP. Unless noted, results in this report are not blank corrected. EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. When the information supplied by the customer can affect the validity of the results, it will be noted on the reoprt. "<" (less than) result signifies the analyte was not detected at or above the reporting limit. Measurement of uncertainty is available upon request. The QC data associated with the sample results included in this report meet the recovery and precision requirements unless specifically indicated otherwise. Definitions of modifications are available upon request.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC AIHA-LAP, LLC - ELLAP 192283

Initial report from 01/27/2020 16:40:56

OrderID: 412000780

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

Lead (Pb) Chain of Custody

EMSL Order ID *(Lab Use Only):* 412000780

EMSL ANALYTICAL, INC.
376 CROMPTON ST
UNIT 71
CHARLOTTTE, NC 28273
704-525-2205

Company : Terracon		**EMSL-Bill to:** ☒ Same ☐ Different If Bill to is Different note instructions in Comments**	
Street: 1450 Fifth Street West		*Third Party Billing requires written authorization from third party*	
City: North Charleston	**State/Province: SC**	**Zip/Postal Code:**	**Country:**
Report To (Name): Craig Langford		**Fax #:**	
Telephone #: 843.442.6658		**Email Address:**	
Project Name/Number: EN197470 Bldg MH62			
Please Provide Results: ☐ Fax ☒ Email	**Purchase Order:**	**U.S. State Samples Taken:**	

Turnaround Time (TAT) Options* - Please Check

☐ 3 Hours | ☐ 6 Hours | ☒ 24 Hours | ☐ 48 Hours | ☐ 3 Days | ☐ 4 Days | ☐ 5 Days | ☐ 10 Days

**Analysis completed in accordance with EMSL's Terms and Conditions located in the Price Guide*

Matrix	Method	Instrument	Reporting Limit	Check
Chips ☐ mg/cm² ☑ % by wt.	SW846-7000B/7420 or AOAC 974.02	Flame Atomic Absorption	0.01%	☑
Air	NIOSH 7082	Flame Atomic Absorption	4 µg/filter	☐
	NIOSH 7105	Graphite Furnace AA	0.03 µg/filter	☐
	NIOSH 7300 modified	ICP-AES	0.5 µg/filter	☐
Wipe* ☐ ASTM ☐ non ASTM *if no box is checked, non-ASTM Wipe is assumed	SW846-7000B/7420	Flame Atomic Absorption	10 µg/wipe	☐
	SW846-6010B or C	ICP-AES	0.5 µg/wipe	☐
TCLP	SW846-1311/7420/SM 3111B	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	SW846-6010B or C	ICP-AES	0.1 mg/L (ppm)	☐
Soil	SW846-7420	Flame Atomic Absorption	40 mg/kg (ppm)	☐
	SW846-7421	Graphite Furnace AA	0.3 mg/kg (ppm)	☐
	SW86-6010B or C	ICP-AES	1 mg/kg (ppm)	☐
Wastewater	SM3111B or SW846-7000B/7420	Flame Atomic Absorption	0.4 mg/L (ppm)	☐
	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐
	SW846-6010B or C	ICP-AES	1 mg/kg (ppm)	☐
Drinking Water	EPA 200.9	Graphite Furnace AA	0.003 mg/L (ppm)	☐

Other:	**Preservation Method (Water):**
Name of Sampler: Craig Langford	**Signature of Sampler:**

Sample #	Location	Volume/Area	Date/Time Sampled
Pb-01	Exterior Wall 2nd Floor		1/24/20
Pb-02	↓ ↓		
Pb-03	↓ ↓		
Pb-04	Door Frames 2nd Floor		
Pb-05	↓ ↓		
Pb-06	↓ ↓		

Client Sample #'s	-			**Total # of Samples:**	12
Relinquished (Client):		**Date:**	1/24/20	**Time:**	1645
Received (Lab):		**Date:**	1/27/20	**Time:**	8:45 AM FX

Comments:

7958 1748 3839

OrderID: 412000780

EMSL ANALYTICAL, INC.
LABORATORY • PRODUCTS • TRAINING

LEAD (Pb) CHAIN OF CUSTODY

EMSL ORDER ID *(Lab Use Only):*

412000780

EMSL ANALYTICAL, INC.
376 CROMPTON ST
UNIT 71
CHARLOTTTE, NC
28273
704-525-2205

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Sample #	Location	Volume/Area	Date/Time Sampled
Pb-07	Windows 2nd Floor		1/24/20
Pb-08	↓ ↓		
Pb-09	↓		
Pb-10	Stairwell Comp.		
Pb-11	↓		
Pb-12	↓		

Comments/Special Instructions:

Page _____ of _____ pages

APPENDIX E

INSPECTOR CREDENTIALS

CRAIG C. LANGFORD

SOUTH CAROLINA DEPARTMENT OF HEALTH AND
ENVIRONMENTAL CONTROL – ASBESTO SECTION

CONSULTANT/PROJECT DESIGN – PD-00032_EXP 07/10/20
CONSULTANT/BUILDING INSPECTOR ASB-22775_EXP 07/09/20
AIR SAMPLER/MONITOR ASB-22599_EXP 07/08/20
SUPERVISOR SA-03094_EXP 07/08/20

SCDHEC ISSUED

Asbestos ID Card

Andrew Mitroka

		Expiration Date:
SUPERAHERA	SA-03255	08/15/20
CONSULTBI	BI-01871	07/16/20
AIRSAMPLER	AS-00605	08/29/20